Dairy Situation

Economics, Statistics, and Cooperatives Service

U.S. Department of Agriculture

DS-379

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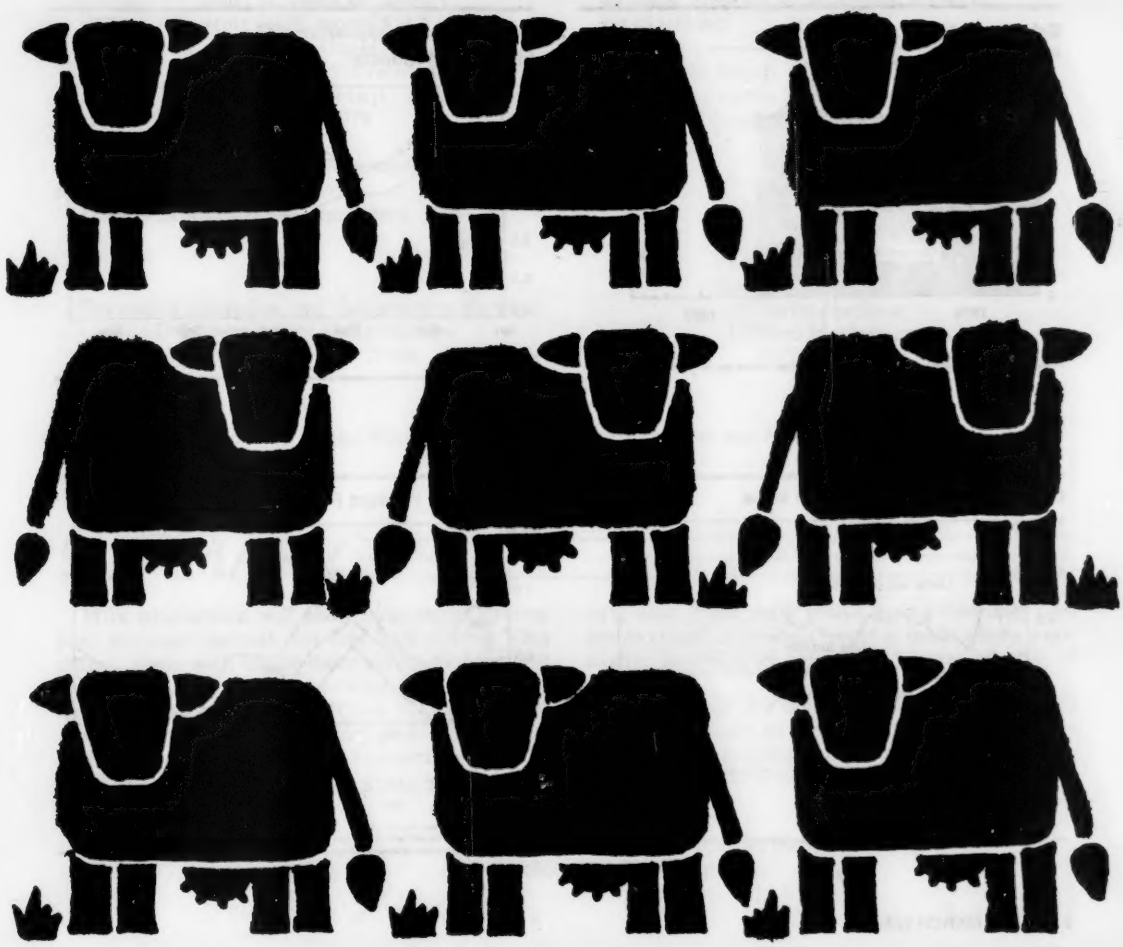
Approved by the World Food and Agricultural Outlook and Situation Board



CURRENT SITUATION CHARTS

U.S. Milk Production by Months

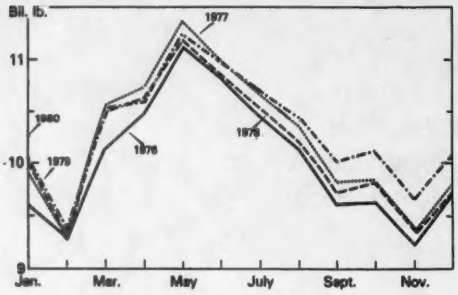
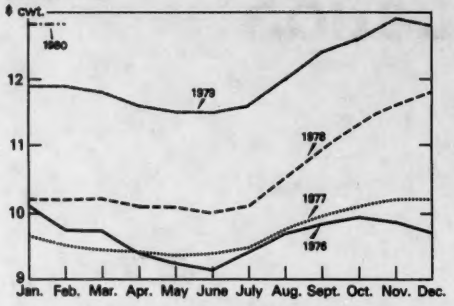


Figure 1

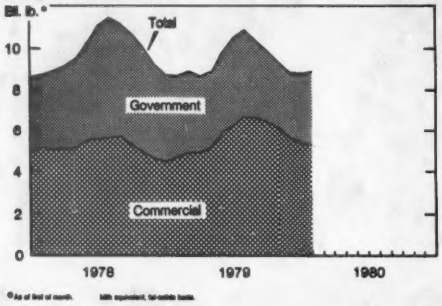
Milk Prices*



*U.S. average price received by farmers for deliveries to plants and dealers.

Figure 2

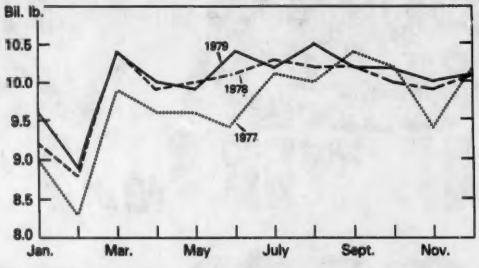
Dairy Product Stocks°



°As of first of month. Milk equivalent, fat-solids basis.

Figure 3

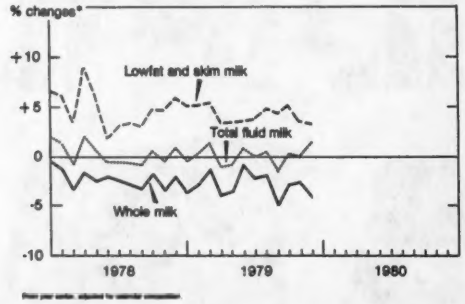
Commercial Disappearance of Milk in All Products*



*Milk equivalent.

Figure 4

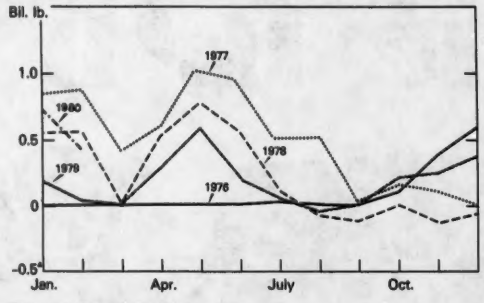
Daily Average Sales of Fluid Milk Items



From year-earlier, adjusted for calendar composition.

Figure 5

USDA Dairy Product Purchases*



*Net removals, milk equivalent, fat-solids basis.
°Negative figures denote domestic sales exceeded purchases.

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SUMMARY

Milk production will show substantial year-to-year increases through the first half of 1980. This output, along with ample dairy product stocks, will keep wholesale dairy product prices near Commodity Credit Corporation (CCC) purchase price levels through the spring production period. With prices at or near the support level, CCC purchases will be considerably greater than a year ago, and, farm milk prices during first-half 1980 are expected to average about a tenth above year-earlier levels, well below the 15-percent gain of early 1979.

The outlook for the second half of the year is much less certain at this time. Key factors will be 1980 crop developments and the effect feed prices, weather conditions and cow numbers have on milk

The *Dairy Situation* is published in March, May, July, October, and December.

production, and the strength of demand for dairy products. At this time, it appears as if milk production for all of 1980 may rise 1 to 2 percent over last year's level.

Milk production in 1979 totaled 123.6 billion pounds, up 1.7 percent from 1978, and the largest output since 1965. The major factor in this increase was a higher output per cow which occurred primarily as a result of larger concentrate feeding and favorable weather conditions. A slow rate of culling also contributed. All 5 of the major producing States posted production increases during 1979, with the 6-percent increase in California the largest.

Production showed strong year-to-year increases during the latter months of 1979, peaking at 3.5 percent over year-earlier levels in November and December. These increases continued in early 1980, with January milk output up 2.6 percent. Substantial gains in production are expected to continue during the next several months, but the year-to-year increases likely will taper off as this year's production is compared to the large increases of the last half of 1979.

During February, manufacturing grade milk prices averaged $11.70 per hundredweight, 8 percent above a year ago. Prices will probably strengthen a little during March in anticipation of the April 1 adjustment which will probably increase the support price of milk about 85 cents. Manufacturing grade milk prices will likely average near that new support level through the spring,and possibly through most of the remainder of the current marketing year. For all of 1980, milk prices will probably average 10 to 12 percent higher than in 1979—primarily due to the April adjustment and the required adjustment to 80 percent of parity on October 1, 1980.

Farmers' milk prices averaged $12.04 per hundredweight during 1979, about 14 percent higher than in 1978. The largest price gains occurred in the first half of the year due tc rebuilding of dairy stocks and relatively strong commercial sales. The large increase in milk production during the second half of 1979 moderated the milk price increases.

Cash receipts from dairying totaled $14.7 billion in 1979, up 15½ percent from 1978. Production cost increases about matched the increase in cash receipts as the index of prices paid for production items rose 14 percent. Thus, the net income position of dairymen approximated the favorable situation in 1978. If production costs rise faster than farm milk prices in 1980, as now seems likely, net incomes in 1980 could decline from the 1979 level.

Reflecting the increased production and stock situation, wholesale prices varied little from November to February as prices of butter, nonfat dry milk and American cheese remained near CCC purchase prices.

Large milk supplies have also begun to be reflected at retail, as year-to-year increases in retail prices for dairy products have slowed in recent months. After an 11½ percent increase in retail dairy prices in 1979, price rises this year should be more modest. For all of 1980, dairy prices at retail may average 8 to 10 percent above last year.

With larger supplies of milk available for manufacturing, production of butter, nonfat dry milk, and American cheese have all posted significant year-to-year increases in recent months. Last year, nearly 67 billion pounds of milk were utilized in the manufacture of dairy products, an increase of 1.7 percent. Cheese production was up 5½ percent over 1978, while both butter and nonfat dry milk output declined by about 1 percent.

Commercial use of dairy products rose 1.2 percent to 120.3 billion pounds during 1979, an all time high. Larger sales of cheese buoyed the total. Meanwhile, per capita civilian consumption of dairy products increased by 5 pounds to 561 pounds milk equivalent.

Commercial stocks of dairy products at the beginning of February were up 20 percent and 40 percent on milkfat and solids-not-fat bases, respectively. The larger stock levels contrast with the very low levels of a year earlier, and are indicative of expanded milk production outpacing demand for dairy products. Unless demand shows unexpected strength, commercial holdings will continue considerably above a year ago through the first half of this year.

USDA purchases during the first two months of 1980 were up sharply from a year ago because of increased manufacture of dairy products, combined with a smaller increase in commercial use. CCC uncommitted inventories of butter and cheese were above year-earlier levels, while nonfat dry milk holdings were down.

Dairy product imports during 1979 totaled 2.3 billion pounds (milk equivalent), nearly equal to 1978. Cheese imports totaled 248 million pounds, as larger offerings of quota-type cheeses more than offset a slight decline in nonquota-types. Commercial exports and shipments to U.S. territories both decreased slightly last year.

Subsidized exports and sales helped reduce European Community (EC) dairy product stocks in late 1979. EC milk production was up 2 percent in 1979 compared to a 3½ percent output gain in 1978.

DAIRY SITUATION

SITUATION AND OUTLOOK

PRODUCTION

Milk Output Remains Above a Year Earlier

Milk production continues above year-earlier levels, as January output increased by 2.6 percent following year-to-year gains of about 3½ percent during November and December. As was the case during the last half of 1979, the January production increase was due to relatively large increases in output per cow combined with very small year-to-year decreases in milk cow numbers. January marked the sixth consecutive month the yearly gains in output per cow exceeded 3 percent, and the fifth straight month that cow numbers declined less than ½ percent.

In the 5 major milk-producing States, January output was up 10 and 7 percent in California and Pennsylvania, respectively. New York posted a modest increase of 2 percent; Wisconsin showed a gain of less than 1 percent (compared with gains of 5 percent or more the previous 6 months); while Minnesota's output was off slightly. Of the 33 reporting States, 19 had milk production gains in January, with 7 States showing substantial increases of 5 percent or more.

Regionally, output during January was up 8½ percent in the Pacific, 5½ percent in the Mountain region and 4 percent in the Northeast. Only the Northern Plains region showed decreased production, while output in the remaining regions ranged from even with a year earlier to over 2 percent above.

Utility cow prices, Omaha

Month	1978	1979	1980
	Dollars per cwt.		
January	27.59	47.33	47.94
February	29.45	50.81	51.22
March	32.44	52.94	
April	36.94	57.00	
May	39.21	55.51	
June	37.61	50.60	
July	38.09	47.80	
August	37.85	48.33	
September	39.75	49.65	
October	40.46	47.71	
November	39.30	46.49	
December	41.85	46.98	
Average	36.71	50.10	

Cow Numbers Down Slightly—Replacement Heifer Inventory Up

Year-to-year decreases in milk cow numbers slowed throughout 1979 and ranged from 0.9 percent in March to 0.3 percent in November. But high cull cow prices during the first half of the year, along with sharp rises in replacement heifer prices, resulted in a repetition of the January-June 1978 decline. Although both slaughter cow and replacement cow prices remained relatively high during second-half 1979, cow numbers were larger in December than in June. Since 1953, such a mid-year to end-of-year increase has occurred only in the past 2 years. The large producing States of Minnesota, Pennsylvania, New York and California accounted for almost all of the additional cows in the July-December period. Milk cow numbers in California and Washington did not decline at all on a month-to-month basis during 1979.

The January 1, 1980, inventory of dairy heifers (500 pounds or more) retained for herd replacement purposes totaled nearly 4.2 million head, about 6 percent more than last year's large replacement herd (figure 7). On January 1, there were 38½ heifers per 100 cows in the U.S. dairy herd, the largest ratio ever for that date. This will probably have the effect of keeping the decline in cow numbers this year similar to the relatively small decrease of 1979.

The January 1 cattle inventory showed there were 10.81 million milk cows on farms, compared with 10.84 million a year earlier (table 4). This represented a decline of less than 0.3 percent, the smallest decrease since 1953 and 1954 when the U.S. milk cow herd showed increases in numbers.

All 5 of the leading producing States had more milk cows on January 1, 1980 than a year ago, with California making the strongest gain, about 2 percent. In all, 13 States had increased milk cow numbers. Among production regions, the Pacific region posted a 2-percent gain in milk cows, while the Lake States, Northeast, Southern Plains, and Mountain regions all had slightly larger dairy

Table 1--Milk production, milk per cow, and milk cows on farms, by months, 1973-79, with comparisons

Month	1973	1974	1975	1976	1977	1978	1979 1/	Change from year earlier: 1978	1979
	Milk production 2/								
	Million pounds							Percent	
January	9,532	9,335	9,341	9,600	9,887	9,972	10,004	+ .9	+ .3
February	8,945	8,763	8,766	9,290	9,301	9,259	9,317	- .5	+ .6
March	10,184	9,989	9,986	10,281	10,572	10,501	10,526	- .7	+ .2
April	10,303	10,124	10,092	10,464	10,725	10,614	10,600	-1.0	- .1
May	10,960	10,869	10,778	11,110	11,354	11,161	11,226	-1.7	+ .6
June	10,542	10,615	10,447	10,806	10,989	10,851	10,973	-1.3	+1.1
July	10,021	10,171	9,972	10,444	10,671	10,516	10,698	-1.5	+1.7
August	9,496	9,711	9,538	10,129	10,363	10,188	10,439	-1.7	+2.5
September	8,885	9,137	9,063	9,607	9,820	9,702	10,014	-1.2	+3.2
October	8,957	9,100	9,180	9,626	9,838	9,795	10,108	- .4	+3.2
November	8,603	8,663	8,830	9,231	9,391	9,333	9,657	- .6	+3.5
December	9,063	9,109	9,341	9,681	9,787	9,717	10,061	- .7	+3.5
Total 3/	115,491	115,586	115,334	120,269	122,698	121,609	123,623	- .9	+1.7
	Milk per cow 2/								
	Pounds							Percent	
January	822	828	833	866	897	913	923	+1.8	+1.1
February	774	778	782	839	844	850	862	+ .7	+1.4
March	884	888	892	929	961	966	977	+ .5	+1.1
April	898	901	903	946	976	979	985	+ .3	+ .6
May	958	968	966	1,006	1,034	1,032	1,044	- .2	+1.2
June	924	946	938	978	1,003	1,004	1,022	+ .1	+1.8
July	881	907	896	945	974	973	996	- .1	+2.4
August	837	866	858	917	945	942	971	- .3	+3.1
September	785	814	816	870	896	896	929	0	+3.7
October	792	812	827	872	899	904	936	+ .6	+3.5
November	761	773	797	836	858	862	895	+ .5	+3.8
December	802	812	843	877	895	896	931	+ .1	+3.9
Total	10,119	10,293	10,350	10,879	11,181	11,218	11,471	+ .3	+2.3
	Milk cows on farms 4/								
	Thousands							Percent	
January	11,601	11,279	11,208	11,087	11,026	10,925	10,833	- .9	- .8
February	11,557	11,261	11,203	11,076	11,018	10,896	10,804	-1.1	- .8
March	11,518	11,254	11,189	11,062	11,004	10,872	10,773	-1.2	- .9
April	11,472	11,240	11,178	11,061	10,992	10,840	10,757	-1.4	- .8
May	11,439	11,225	11,159	11,049	10,978	10,818	10,750	-1.5	- .6
June	11,407	11,216	11,143	11,049	10,961	10,807	10,738	-1.4	- .6
July	11,375	11,215	11,131	11,052	10,960	10,803	10,741	-1.4	- .6
August	11,348	11,219	11,121	11,049	10,968	10,813	10,755	-1.4	- .5
September	11,322	11,220	11,108	11,039	10,963	10,827	10,785	-1.2	- .4
October	11,314	11,213	11,101	11,045	10,945	10,830	10,795	-1.1	- .3
November	11,308	11,209	11,086	11,044	10,942	10,825	10,794	-1.1	- .3
December	11,304	11,215	11,086	11,035	10,933	10,839	10,803	- .9	- .3
Annual average	11,413	11,230	11,143	11,055	10,974	10,841	10,777	-1.2	- .6

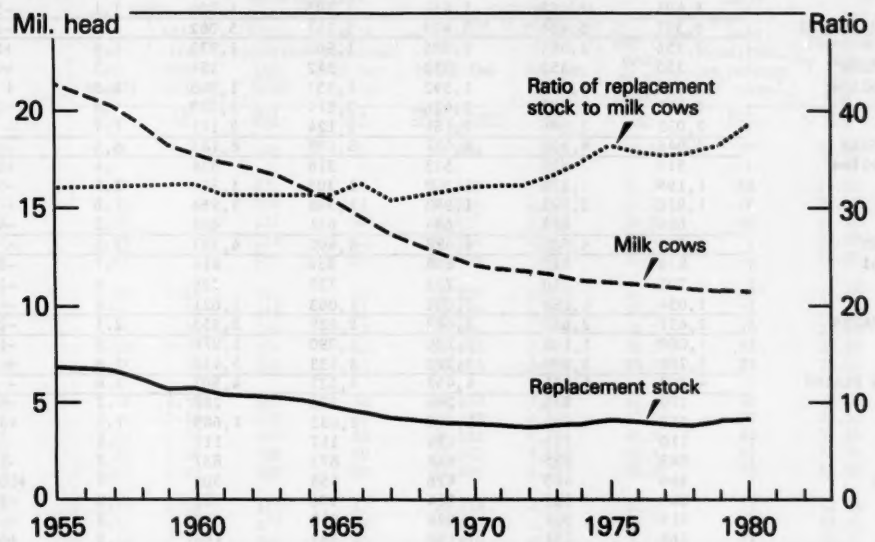
1/ Preliminary.
2/ Excludes milk sucked by calves.
3/ May not add due to rounding.
4/ Excludes heifers not yet fresh.

Table 2— Milk cow numbers, milk per cow, and changes by production regions, 1979

Production regions	Milk cow numbers[1]	Milk per cow	1979 change from year earlier		
			Milk cow numbers[1]	Milk per cow	Milk production
	1,000 hd.	Pounds		Percent	
Northeast	2,157	11,721	-0.8	+2.6	+1.8
Lake States	3,053	11,767	+0.1	+2.2	+2.3
Corn Belt	1,453	10,686	-1.3	+1.1	-0.2
Northern Plains	509	9,984	-4.0	+2.8	-1.3
Appalachian	814	10,057	-1.9	+1.8	-0.2
Southeast	443	9,917	-3.1	+3.0	-0.1
Delta States	309	8,269	-4.3	+1.6	-2.8
Southern Plains	421	10,706	-0.7	+0.4	-0.4
Mountain	448	12,355	+1.4	+0.7	+2.1
Pacific	1,157	14,229	+2.8	+2.7	+5.6
United States[2]	[3]10,777	[3]11,471	-0.6	+2.3	+1.7

[1] Average number during the year. [2] Includes Alaska and Hawaii. [3] May not add to totals due to rounding.

Milk Cows and Replacement Stock*



*January inventory of milk cows and dairy heifers over 500 pounds.

Figure 7

Table 3--Milk: Production by production regions, 1975-79, with comparisons

State and region	1975	1976	1977	1978	1979 1/	1979: As percent of US total	1979: Change from year earlier
	Mil. lb.					Percent	
Maine	629	628	638	641	638	0.5	-0.5
New Hampshire	336	335	339	341	342	.3	+ .3
Vermont	2,009	2,093	2,100	2,136	2,179	1.8	+2.0
Massachusetts	601	598	597	571	563	.5	-1.4
Rhode Island	63	60	57	55	50	2/	-9.1
Connecticut	608	616	624	612	605	.5	-1.1
New York	9,964	10,198	10,224	10,408	10,679	8.6	+2.6
New Jersey	528	545	549	525	494	.4	-5.9
Pennsylvania	7,140	7,507	7,791	7,881	8,084	6.5	+2.6
Delaware	127	135	139	129	129	.1	0
Maryland	1,510	1,549	1,575	1,540	1,520	1.2	-1.3
NORTHEAST	23,515	24,264	24,633	24,839	25,283	20.5	+1.8
Michigan	4,111	4,620	4,761	4,793	4,830	3.9	+ .8
Wisconsin	18,900	20,296	21,041	21,252	21,950	17.8	+3.3
Minnesota	8,946	9,239	9,483	9,089	9,145	7.4	+ .6
LAKE STATES	32,257	34,155	35,285	35,134	35,925	29.1	+2.3
Ohio	4,259	4,503	4,455	4,275	4,265	3.5	- .2
Indiana	2,210	2,240	2,270	2,178	2,175	1.8	- .1
Illinois	2,440	2,483	2,515	2,403	2,420	2.0	+ .7
Iowa	3,893	3,954	4,030	3,960	3,920	3.2	-1.0
Missouri	2,840	2,919	2,918	2,746	2,747	2.2	2/
CORN BELT	15,642	16,099	16,188	15,562	15,527	12.6	- .2
North Dakota	917	948	954	903	874	.7	-3.2
South Dakota	1,556	1,668	1,670	1,600	1,609	1.3	+ .6
Nebraska	1,431	1,409	1,344	1,269	1,295	1.0	+2.0
Kansas	1,403	1,463	1,461	1,395	1,304	1.1	-5.2
NORTHERN PLAINS	5,307	5,488	5,429	5,147	5,082	4.1	-1.3
Virginia	1,756	1,884	1,905	1,902	1,933	1.6	+1.6
West Virginia	350	356	333	342	357	.3	+4.4
North Carolina	1,490	1,590	1,592	1,557	1,565	1.3	+ .5
Kentucky	2,319	2,383	2,426	2,274	2,220	1.8	-2.4
Tennessee	2,031	2,096	2,181	2,124	2,111	1.7	- .6
APPALACHIAN	7,946	8,309	8,437	8,199	8,186	6.6	- .2
South Carolina	512	521	523	516	524	.4	+1.6
Georgia	1,199	1,279	1,288	1,305	1,304	1.1	- .1
Florida	1,956	2,023	1,993	1,948	1,966	1.6	+ .9
Alabama	686	682	684	631	603	.5	-4.4
SOUTHEAST	4,353	4,505	4,488	4,400	4,397	3.6	- .1
Mississippi	876	862	858	836	814	.7	-2.6
Arkansas	707	710	725	729	720	.6	-1.2
Louisiana	1,054	1,088	1,089	1,063	1,021	.8	-4.0
DELTA STATES	2,637	2,660	2,672	2,628	2,555	2.1	-2.8
Oklahoma	1,060	1,102	1,120	1,090	1,070	.9	-1.8
Texas	3,208	3,309	3,372	3,433	3,437	2.8	+ .1
SOUTHERN PLAINS	4,268	4,411	4,492	4,523	4,507	3.6	- .4
Montana	278	275	296	306	287	.2	-6.2
Idaho	1,555	1,554	1,600	1,633	1,689	1.4	+3.4
Wyoming	110	113	124	117	117	.1	0
Colorado	845	835	848	872	857	.7	-1.7
New Mexico	366	405	426	458	506	.4	+10.5
Arizona	840	882	914	906	932	.8	+2.9
Utah	919	924	936	940	948	.8	+ .9
Nevada	168	191	198	187	199	.2	+6.4
MOUNTAIN	5,081	5,179	5,342	5,419	5,535	4.5	+2.1
Washington	2,322	2,428	2,546	2,669	2,811	2.3	+5.3
Oregon	990	1,024	1,052	1,065	1,103	.9	+3.6
California	10,853	11,583	11,968	11,859	12,549	10.2	+5.8
PACIFIC	14,165	15,035	15,566	15,593	16,463	13.3	+5.6
Alaska	17	16	16	15	13	2/	-13.3
Hawaii	146	148	150	150	150	.1	0
UNITED STATES	115,334	120,269	122,698	121,609	123,623	100.0	+1.7

1/ Preliminary. 2/ Less than 0.05 percent.

Table 4--Milk production and factors affecting supply, United States, selected years, 1955-80

Year	Milk cattle on farms, January 1 1/			Milk cows on farms, average during year	Milk production		Average prices received by farmers per 100 pounds		
	Milk cows and heifers that have calved	Milk cow replacements; heifers 500 pounds and over			Per cow	Total	All milk, wholesale	Milk, eligible for fluid market	Milk, manufacturing grade
		Total	Per 100 cows						
	Thou.	Thou.	No.	Thou.	Lb.	Mil. lb.	Dol.	Dol.	Dol.
1955	21,320	6,832	32.0	21,044	5,842	122,945	4.01	4.50	3.15
1960	17,650	5,686	32.2	17,515	7,029	123,109	4.21	4.69	3.25
1965	15,380	4,780	31.1	14,953	8,305	124,180	4.23	4.63	3.34
1966	14,490	4,450	30.7	14,071	8,522	119,912	4.81	5.17	3.97
1967	13,725	4,215	30.7	13,415	8,851	118,732	5.02	5.43	4.06
1968	13,115	4,080	31.1	12,832	9,135	117,225	5.24	5.67	4.22
1969	12,550	3,990	31.8	12,307	9,434	116,108	5.49	5.87	4.45
1970	12,091	3,880	32.1	12,000	9,751	117,007	5.71	6.05	4.70
1971	11,909	3,843	32.3	11,839	10,015	118,566	5.87	6.19	4.86
1972	11,776	3,828	32.5	11,700	10,259	120,025	6.07	6.38	5.08
1973	11,622	3,872	33.3	11,413	10,119	115,491	7.14	7.42	6.20
1974	11,297	3,941	34.9	11,230	10,293	115,586	8.33	8.66	7.13
1975	11,220	4,087	36.4	11,143	10,350	115,334	8.75	9.02	7.63
1976	11,087	3,958	35.7	11,055	10,879	120,269	9.66	9.93	8.56
1977	11,035	3,888	35.2	10,974	11,181	122,698	9.72	9.96	8.70
1978	10,939	3,896	35.6	10,841	11,218	121,609	10.58	10.80	9.65
1979	10,839	3,936	36.3	10,777	11,471	123,623	12.04	12.23	11.10
1980 2/	10,810	4,166	38.5						

Year	Dairy ration cost		Milk cow cost		Grain and other concentrates fed to milk cows 3/			Dairy pasture feed condition, as percent of normal	Alfalfa hay prices	
	Value per 100 pounds	Milk-feed price ratio 4/	Price received per head	Milk required to buy a cow	Total fed	Per cow	Per 100 pounds of milk produced		Received by farmers per ton	Paid by farmers per ton
	Dol.	Lb.	Dol.	Cwt.	Thou. tons	Lb.	Lb.	Pct.	Dol.	Dol.
1955	3.16		146	36	18,664	1,758	30.1	77	22.00	33.70
1960	2.92		223	53	19,821	2,259	32.2	82	21.00	31.60
1961	2.92		224	53	20,916	2,404	33.2	84	21.00	30.90
1962	2.95		221	54	21,617	2,533	34.3	80	21.40	30.60
1963	3.04		215	52	21,858	2,646	35.1	73	23.50	32.90
1964	3.03		209	50	22,464	2,800	35.9	73	24.00	32.60
1965	3.03	1.18	212	50	22,827	2,953	36.7	80	24.00	33.00
1966	3.15	1.30	246	51	22,569	3,000	37.6	78	24.70	33.40
1967	3.23	1.35	260	52	22,790	3,374	38.3	80	23.60	34.08
1968	3.10	1.47	274	52	22,886	3,519	39.1	83	23.00	32.94
1969	3.15	1.54	300	55	23,615	3,726	40.7	82	23.90	34.08
1970	3.28	1.53	332	58	24,870	3,979	42.4	81	24.70	34.69
1971	3.44	1.49	358	61	25,107	4,070	42.4	79	27.10	37.57
1972	3.52	1.52	397	65	25,162	4,298	41.9	80	31.45	40.15
1973	4.88	1.28	496	69	25,042	4,389	43.4	83	41.55	51.65
1974	6.23	1.22	500	60	24,586	4,384	42.6	75	52.58	63.58
1975	6.25	1.31	412	47	24,274	4,357	42.1	79	54.38	66.18
1976	6.31	1.37	477	49	25,083	4,545	41.7	70	60.81	72.16
1977	6.20	1.39	504	52	25,518	4,709	42.1	72	60.57	74.25
1978	6.07	1.53	675	64	26,082	4,806	42.8	76	52.18	5/
1979 2/	6.68	1.55	1,038	86	---	---	---	82	60.52	5/

1/ Prior to 1965, estimated by Livestock Section, ERS.
2/ Preliminary.
3/ On farms where milk or cream was sold. Beginning 1966, data are for all farms where milk was produced.
4/ Pounds of 16 percent protein ration equal in value to 1 pound of milk.
5/ Discontinued series.

Milk cows and replacements, 1976-79

Date	Milk cows	Replacement heifers, 500 pounds and over	
		Number	Per 100 cows
	1,000		*Number*
1977			
January 1	11,035	3,888	35.2
July 1	10,977	4,005	36.5
1978			
January 1	10,939	3,896	35.6
July 1	10,801	3,957	36.6
1979			
January 1	10,839	3,936	36.3
July 1	10,734	4,117	38.4
1980			
January 1	10,810	4,166	38.5

herds than on January 1, 1979. Significant reductions of 2½ percent or more were recorded in the Northern Plains, Appalachian, Southeast, and Delta States regions.

Milk-Feed Ratio Favorable

Although prices of feed-mix ingredients fell after the suspension of agricultural sales to the Soviet Union on January 4, they have since risen to near or above pre-suspension levels. In early March, No. 2 yellow corn prices at Chicago stood at $2.65 per bushel, or about 30 cents above a year ago and 35 cents above the low recorded just after the sale suspension. Meanwhile, soybean meal (44 percent protein) was priced at $170 per ton at Decatur, down more than $20 from a year ago.

The average price of 16-percent protein dairy ration averaged $163 per ton during February, or about $13 more than a year ago. The February milk-feed ratio equaled 1.57, still relatively favorable to milk producers, but down from the 1.59 of a year earlier (table 5 and figure 8).

Among roughage feeds, February prices received for alfalfa hay (baled) averaged about $67 per ton, about a fourth more than last year. Prices ranged widely, though, averaging $116 per ton in California, in contrast with the $33 per ton reported in Wisconsin.

1979 Review

Total 1979 milk production was 123.6 billion pounds, a 1.7 percent increase over the 1978 output of 121.6 billion pounds and the largest annual production since 1965 (table 1). A 2.3 percent gain in output per cow more than offset a 0.6-percent drop in average cow numbers to form the basis of the expansion. No clear pattern in milk production was evident over the first 6 months of 1979, with production for the period averaging less than ½ percent over year-earlier levels. But the second half of 1979 was characterized by a strong expansion in production, with monthly year-to-year increases ranging from 1.7 percent to 3½ percent.

While the average year-to-year gain in output per cow was modest during the first 6 months, output per cow averaged 3.4 percent higher over the July-December period. Several factors may account for this. As milk-feed price relationships remained relatively advantageous, dairymen surveyed fed 6½ percent more concentrate ration on July 1 and October 1 than a year earlier. In addition, the large number of replacement heifers that came into production in 1978 were approaching their full productivity in 1979. Weather and pasture conditions were very conducive to high milk output during late summer and early fall in the important Lake States. Finally, milk per cow in California rebounded sharply from the very low levels of

Table 5—Milk-feed price ratio by months, 1971-80[1]

Month	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
					Pounds					
January	1.48	1.57	1.31	1.32	1.14	1.49	1.31	1.50	1.61	1.54
February	1.49	1.59	1.32	1.34	1.22	1.44	1.26	1.52	1.59	1.57
March	1.46	1.54	1.30	1.36	1.26	1.43	1.28	1.51	1.58	
April	1.43	1.50	1.31	1.38	1.22	1.39	1.28	1.47	1.56	
May	1.40	1.48	1.22	1.32	1.22	1.35	1.23	1.49	1.53	
June	1.38	1.47	1.14	1.25	1.23	1.28	1.26	1.43	1.51	
July	1.43	1.49	1.19	1.21	1.27	1.30	1.35	1.45	1.43	
August	1.46	1.52	1.14	1.02	1.28	1.34	1.46	1.54	1.50	
September	1.55	1.53	1.31	1.09	1.37	1.34	1.56	1.59	1.54	
October	1.62	1.56	1.35	1.11	1.43	1.37	1.62	1.64	1.55	
November	1.63	1.53	1.40	1.12	1.50	1.38	1.58	1.62	1.58	
December	1.60	1.41	1.33	1.11	1.54	1.34	1.51	1.63	1.57	
Average	1.49	1.52	1.28	1.22	1.31	1.37	1.39	1.53	1.55	

[1] Pounds of 16% protein ration equal in value to 1 pound of milk.

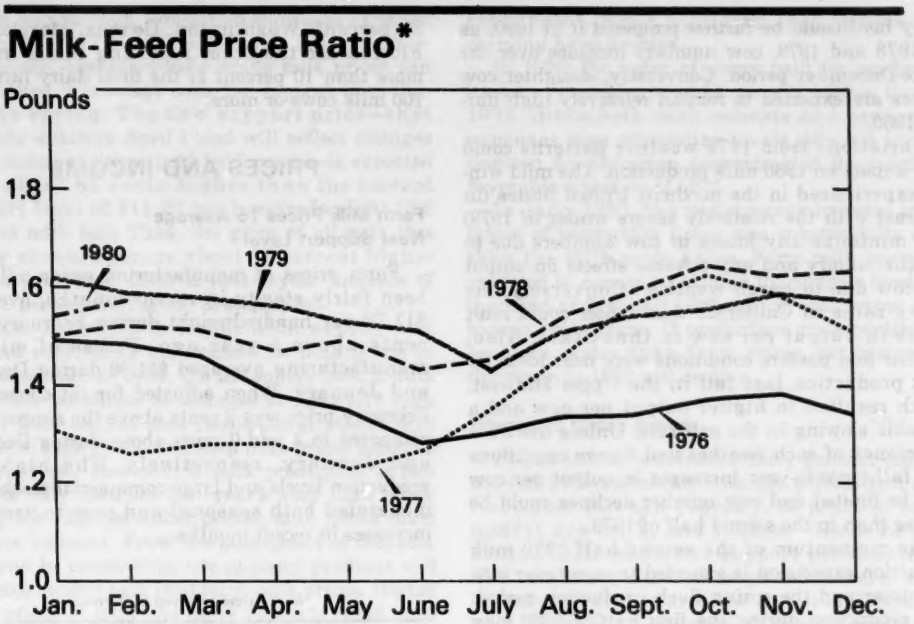


Figure 8

1978—also contributing to the national gain in output per cow.

All 5 of the major milk producing States posted production increases during 1979, with California showing the largest gain of nearly 6 percent. Output was up 3¼ percent in Wisconsin, while both New York and Pennsylvania exceeded their 1978 levels by 2½ percent; and Minnesota production increased only ½ percent (table 3). Together, these States accounted for 95 percent of the total U.S. increase in milk production.

Regional production gains generally occurred in those regions which contained the major producing States. The Pacific, Lake States, and Northeast regions (which include the 5 largest producing States) had increases of 5.6, 2.3, and 1.8 percent, respectively (tables 2 and 3). The Mountain region, with a 2.1-percent increase, was the only other region that had increased milk production during 1979. In the remaining six production regions, output declines ranged from 0.1 percent to 2.8 percent.

Production Increases To Continue

The milk production expansion begun in the second half of 1979 is expected to continue at least through the first half of 1980, assuring an output gain for the year. Although year-to-year increases in farm milk prices probably will not match last year's strong advances, feed prices are now expected to be at levels not significantly different from those in 1979. At the same time, though, nonfeed production costs can be expected to increase at a substantial rate, which could temper the incentives for larger milk output. Nevertheless, economic conditions should be relatively favorable for milk producers.

Milk output per cow is expected to show a fairly strong increase this year, with the largest gains occurring during the first half. Milk-feed price relationships are expected to be fairly advantageous, thus heavier concentrate ration feeding per cow is quite possible. Year-to-year gains in milk per cow during second-half 1980, however, could taper off as this year's production is compared to the large increases posted in the last half of 1979.

The very large supply of replacement heifers on January 1 suggests the 1980 decline in cow numbers may be similar to the small decrease experienced in 1979. The annual decline in the U.S.

dairy herd could be further tempered if in 1980, as in 1978 and 1979, cow numbers increase over the June-December period. Conversely, slaughter cow prices are expected to remain relatively high during 1980.

Variations from 1979 weather patterns could also impact on 1980 milk production. The mild winter experienced in the northern United States (in contrast with the relatively severe winter of 1979) will minimize any losses in cow numbers due to weather injury and any adverse effects on output per cow due to harsh weather. Conversely, the heavy rains in California this winter could limit gains in output per cow in that State. Also, weather and pasture conditions were near ideal for milk production last fall in the Upper Midwest, which resulted in higher output per cow and a probable slowing in the cull rate. Unless there's a recurrence of such weather and forage conditions this fall, year-to-year increases in output per cow may be limited and cow number declines could be greater than in the second half of 1979.

The momentum of the second-half 1979 milk production expansion is expected to carry over into the winter and the spring flush production period. Milk production during the first half of 1980 may be 2½-3½ percent larger than a year ago. Second-half production will be dependent upon many factors, including whether or not cow numbers increase over the June-December period, weather and pasture conditions during the summer and fall, the support price of milk effective October 1, and any major changes in expected feed prices. For all of 1980, milk production could increase by 1 to 2 percent over 1979.

Fewer But Larger Dairy Operations

During 1979, general trends with respect to dairy farm numbers continued. The total number of operations with milk cows declined to about 350,000, a drop of about 6 percent from 1978. Wisconsin and Minnesota still retain the largest number of dairy herds, with 45,000 and 28,000 respectively.

Also during 1979, larger operations continued to increase their numbers in relation to the total. Dairy operations in 1979 with more than 50 cows accounted for 18½ percent of the total number of dairy farms, but held 62 percent of the milk cow inventory. In 1978, 17 percent of the operations had 50 or more cows and held 60 percent of the Nation's milk cows. The 5 percent of the operations with herds of 100 cows or more now account for nearly a third of the total U.S. dairy herd. In contrast, the 63 percent of milk cow operations with fewer than 30 cows held only 15 percent of the inventory. California had the largest proportion of dairy operations with herds greater than 100 cows, 31 percent. Washington, Georgia, Maryland and Florida are the other reporting States in which more than 10 percent of the total dairy farms had 100 milk cows or more.

PRICES AND INCOME

Farm Milk Prices To Average Near Support Level

Farm prices of manufacturing grade milk have been fairly steady in recent months, averaging $11.70 per hundredweight during February, or 90 cents above a year ago. Prices of milk for manufacturing averaged $11.80 during December and January. When adjusted for fat content, the February price was 9 cents above the support level, compared to 4 and 9 cents above during December and January, respectively. The high milk production levels and large commercial stocks have moderated both seasonal and year-to-year price increases in recent months.

Milk prices received by farmers

Month	All sold to plants			Manufacturing grade		
	1978	1979	1980	1978	1979	1980
	Dollars per 100 pounds					
January	10.20	11.90	12.80	9.17	10.90	11.80
February	10.20	11.90	12.80	9.21	10.80	11.70
March	10.20	11.80		9.27	10.80	
April	10.10	11.60		9.30	10.70	
May	10.10	11.50		9.26	10.80	
June	10.00	11.50		9.24	10.80	
July	10.10	11.60		9.28	10.80	
August	10.50	12.00		9.62	11.10	
September	10.90	12.40		9.96	11.40	
October	11.30	12.60		10.50	11.60	
November	11.60	12.90		10.80	11.70	
December	11.80	12.80		10.90	11.80	
Average	10.58	12.04		9.71	11.10	

Dairymen received an average of $12.80 per hundredweight for all milk sold during February, up 7½ percent from a year ago. Year-to-year increases have ranged from 7½ to 8½ percent in recent months which contrasts to a year ago when a tight supply-demand balance resulted in 16- to 17-percent gains in farm milk prices.

For April, minimum Class I Federal order prices will average $13.45 per hundredweight, down 2 cents from March and 83 cents above a year earlier. Class I prices negotiated by cooperative associations averaged an estimated 61 cents per hundredweight over Federal order minimum Class I prices during February. This was within the 60 to 65 cents range of over-order payments that has existed since last July.

With sizable milk production increases expected for the first half of 1980 along with large commercial stocks, manufacturing grade milk prices can be expected to average near the support level during the spring. The new support price—that becomes effective April 1 and will reflect changes in the index of prices paid by farmers—is expected to be about 85 cents higher than the current support level of $11.22 per hundredweight (3.5 percent milk fat). Thus, the price of all milk this spring should average about 10 percent higher than a year ago, after a year-to-year increase of about 8 percent during the first quarter.

Much uncertainty about both supply and demand surrounds the outlook for milk prices in the second half of 1980. On the supply side, if milk production continues to increase at relatively high rates, both output and commercial stocks will remain at high levels and keep milk prices near the support level. However, if milk production is less than or only matches last year's very high levels during the July-December period, milk prices could be more buoyant. From the standpoint of demand, patterns in commercial use of dairy products will influence second-half 1980 farm milk prices. Higher retail prices of milk and dairy products could limit gains in commercial use, which would exert downward pressure on farm milk prices. However, prices of alternative protein sources may increase and stimulate dairy product use, which could strengthen farm milk prices. The latter case of strengthening demand could lead to much stronger farm milk prices if production gains were to taper off and only about match year-earlier levels during July-December. For all of 1980, milk prices will probably average 10 to 12 percent higher than in 1979.

Prices received by farmers for all milk averaged $12.04 per one hundred pounds during 1979, compared to $10.58 in 1978. Milk prices showed a great deal of strength through the first 9 months, because of manufacturers rebuilding stocks, relatively strong sales of dairy products, and small gains in milk production. With increased milk output and ample stocks of dairy products, though, year-to-year increases slowed during the latter part of 1979. The preliminary estimate of manufacturing grade milk prices was an average $11.10 per hundredweight last year, compared with a $9.65 weighted average in 1978.

Higher Prices and Larger Marketings Boost 1979 Cash Receipts

Cash receipts to dairying operations during 1979 were a record high $14.7 billion, 15½ percent above 1978's $12.7 billion. The sharp rise was due mainly to substantially higher prices for milk, although larger marketings of milk and cream also contributed. Since 1972, farm cash receipts from dairying have doubled.

In 1979, the index of prices paid for production items averaged about 14 percent higher than in 1978. Since both cash receipts and production expenses rose at similar levels, the net income position for dairymen approximated the relatively favorable situation of 1978.

In early 1980, the year-to-year increase in the prices of production items was substantially more than the milk price gains. Farm milk prices are expected to remain at or near the support level during most of first-half 1980, which will temper year-to-year price gains. If production costs continue to escalate faster than farm prices, net income for dairymen in 1980 will decline.

Wholesale Prices Steady

Prices in the wholesale dairy product markets showed little variability over the period from early November through February, as prices of butter, nonfat dry milk, and cheddar cheese hovered around their respective support purchase prices. The combined effect of large commercial stocks (relative to last year's low levels) and expanded milk production maintained downward pressure on wholesale dairy prices throughout the period.

Wholesale prices of butter, nonfat dry milk, and cheddar cheese may rise during March, and by April 1 be at or near their new CCC purchase prices. With still abundant commercial dairy stocks, the advent of the seasonally heavy spring milk production period, and an uncertain outlook for dairy product sales, wholesale prices can be expected to remain at or near support purchase levels this spring. Unlike 1979, when strong demand kept cheddar cheese prices above the support level during part of the flush production season, wholesale cheese prices will likely be near their support purchase prices this spring.

At the end of February, Chicago Grade A butter prices were quoted near the current support price of $1.31 per pound, while wholesale prices of nonfat dry milk were also near the support purchase price of 84 cents per pound (high heat, Central States area) (figure 9). Powder prices have dropped about ½ cent from the marketing year high that prevailed during October and November. With respect to American cheese, 40-pound blocks of cheddar were priced at $1.26 per pound in late February at Wisconsin assembling points, while 500-pound barrels were about $1.20 per pound. Prices of both block and barrel cheese have fallen 5-6 cents from their highs recorded during September.

The January wholesale dairy product index, as reported by the Bureau of Labor Statistics (BLS), was 221.4 (1967=100), up 9 percent over a year earlier. Year-to-year increases in the index have

Wholesale Dairy Product Prices

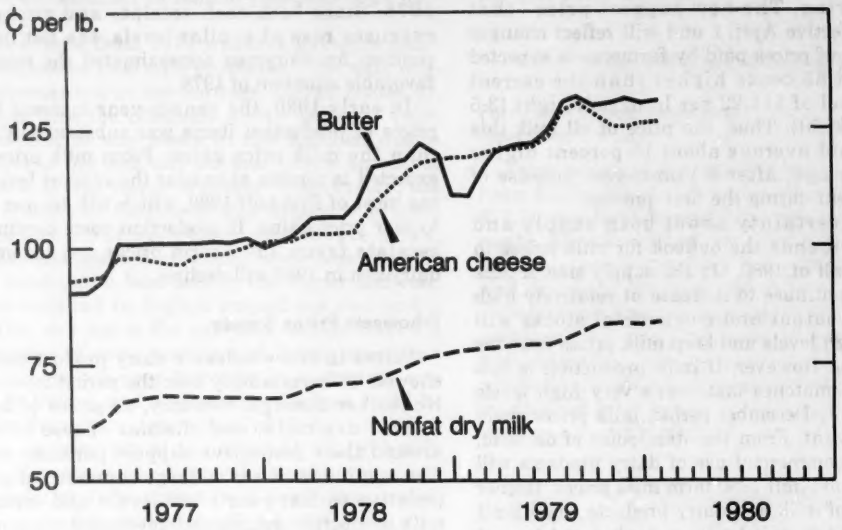


Figure 9

slowed in recent months, reflecting larger milk production and large commercial dairy product stocks. Since September, the wholesale dairy product index has been fairly constant, increasing only 1.4 percent. Wholesale prices can be expected to increase over the next few months as the higher April 1 support prices become effective.

Retail Price Increases Moderate

The large volume of milk production and commercial dairy stocks that have characterized recent months have begun to be reflected in retail dairy prices, as year-to-year price increases have slowed. The BLS retail dairy product index stood at 218.4 during January, up 10 percent from a year ago; December prices increased by a similar rate (figure 10). This compares with average year-to-year increases of nearly 12 percent from August through November 1979.

During December and January, rises in retail prices of fresh milk and cream products and manufactured products slowed. Little variation in wholesale prices of cheese and butter since October has resulted in the slowing of year-to-year price gains of manufactured dairy products. Increases in fluid milk and cream prices have slowed due to the relative stability of the Minnesota-Wisconsin average price of manufacturing grade milk—the basic mover of minimum Class I milk prices.

Retail dairy product prices

Item	Index base	Year 1978	Jan. 1979	Year 1979	Jan. 1980
Consumer Price Index[1]	1967=100	195.4	204.7	217.4	233.2
All food[1]	1967=100	211.4	223.9	234.5	243.8
All dairy products[1]	1967=100	185.6	198.4	207.1	218.4
Fluid milk and cream	12/77=100	104.8	111.8	116.8	123.2
Whole milk	1967=100	171.7	183.5	191.4	202.3
Other	12/77=100	104.5	112.1	116.4	122.1
Manufactured dairy products	12/77=100	105.0	112.7	117.4	123.8
Butter	1967=100	179.4	195.8	202.9	216.9
Cheese	12/77=100	104.8	112.9	117.7	123.5
Frozen desserts	12/77=100	104.7	111.8	117.0	124.0
Other	12/77=100	104.4	110.1	114.0	119.8

[1] For all urban consumers starting January 1978.

Retail Food and Dairy Product Prices

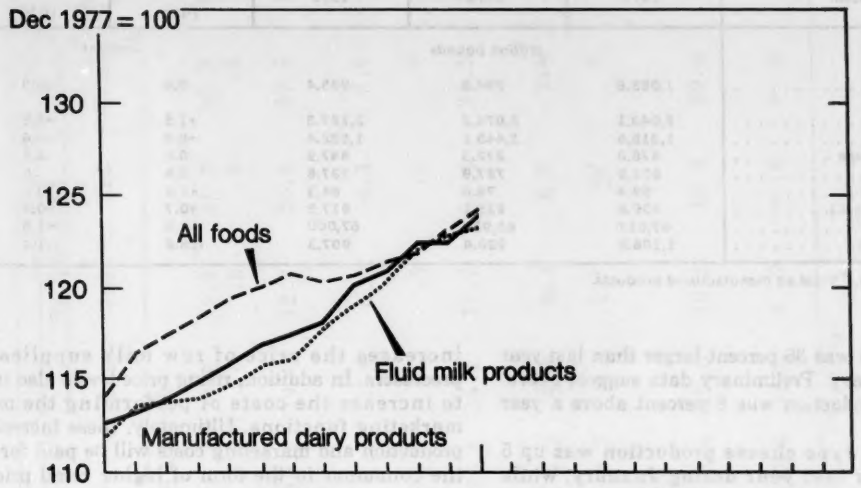


Figure 10

Retail dairy product prices during 1979 averaged 11.6 percent above 1978, considerably higher than the 3 percent and 7 percent gains posted in 1978 and 1977. Increased value of milk at the farm contributed nearly two-thirds to the higher retail prices in 1979, with higher marketing costs accounting for the remainder. The farmer's share of the consumer's dairy product expenditures increased last year to 52.3 percent from 51.3 percent in 1978.

With larger milk production and abundant commercial stocks, retail dairy product price increases in 1980 likely will not be as great as in 1979. Smaller year-to-year increases in farm milk prices may be partially offset by higher processing and marketing costs. Retail dairy product prices likely will rise by 8 to 10 percent this year, compared with the expected 7- to 11-percent increase in the all food price index.

UTILIZATION

Manufactured Product Output Up Substantially

During December-January, 5 percent more milk was utilized for the manufacture of dairy products than a year earlier. This relatively large increase in dairy product output reflected the heavy raw milk supply situation characteristic of recent months. Butter-powder production absorbed about four-fifths of the increased use of milk.

January butter output was 7 percent more than a year earlier, after being up 8 percent during December. Nonfat dry milk production likewise

Wisconsin out-of-state milk shipments

Month	1979		1980	
	Loads	Volume	Loads	Volume
	Number	*Thousand pounds*	*Number*	*Thousand pounds*
January	302	14,194	156	7,332
February	180	8,460	70	3,290
March	64	3,008		
April	17	799		
May	24	1,128		
June	6	282		
July	36	1,692		
August	157	7,379		
September	294	13,818		
October	175	8,225		
November	232	10,904		
December	251	11,797		
Total	1,738	81,686		

Table 6—Production of selected manufactured dairy products, 1977-79

Item	1977	1978	1979	Change from year earlier	
				1978	1979
	Million pounds			*Percent*	
Butter	1,085.6	994.3	985.4	-8.4	-0.9
Cheese:					
American	2,043.1	2,074.2	2,187.3	+1.5	+5.5
Other	1,315.5	1,445.1	1,522.4	+9.9	+5.4
Creamed cottage	878.0	872.3	847.9	-0.6	-2.8
Canned milk	818.9	787.9	787.8	-3.8	0
Dry whole milk	69.4	74.6	84.3	+7.5	+13.0
Ice cream (mil. gal.)	809.8	815.1	817.9	+0.7	+0.3
Milk equivalent[2]	67,017	65,920	67,000	-1.6	+1.6
Nonfat dry milk	1,106.6	920.4	907.3	-16.8	-1.4

[1] Preliminary. [2] Total all manufactured products.

increased and was 36 percent larger than last year during January. Preliminary data suggest February butter production was 8 percent above a year ago.

American-type cheese production was up 5 percent over last year during January, while weekly data show February output increased by 3 percent. Meanwhile, manufacture of other cheese varieties during January showed a large year-to-year increase of 12 percent.

During 1979, about 67 billion pounds of milk were utilized in manufacturing dairy products, up about 1.7 percent from the 65.9 billion pounds used in 1978 (table 6). Together, American and other-than-American varieties of cheese used about 1½ billion pounds more milk in 1979. Dry whole milk, canned milk, and frozen desserts all used more milk last year than in 1978, while butter and creamed cottage cheese used less.

Butter production during 1979 decreased nearly 1 percent from 1978, as early-year decreases were nearly offset by late-year output increases. Nonfat dry milk production was off by 1½ percent. Meanwhile, total U.S. cheese production increased by nearly 5½ percent last year.

With milk supplies available for manufacturing purposes expected to remain large, output of butter and cheese during first-half 1980 should continue to post year-to-year increases similar to those of recent months.

1980 Commercial Use Uncertain

Commercial use of milk and dairy products in 1980 could match or exceed the record high 1979 total, but such performance is not assured. The impact of general economic conditions on various segments of the industry and the consumer will affect the level of commercial use this year. First, increased costs of production items to farmers are reflected in the support price of milk, which in turn increases the price of raw milk supplies to processers. In addition, rising price levels also tend to increase the costs of performing the milk marketing functions. Ultimately, these increased production and marketing costs will be paid for by the consumer in the form of higher retail prices, which may serve to dampen dairy product sales.

Second, inflation will limit gains in consumer purchasing power, an important demand factor. If the unemployment rate also increases during 1980 as expected, disposable personal income gains would be limited and this could inhibit gains in commercial dairy product use.

Third, sharply higher energy costs could precipitate a decline in away-from-home eating this year. This might produce mixed effects, decreasing demand for cheese and butter by the restaurant industry, but might spur larger sales of fluid milk, which is thought to be more of an "at-home" beverage.

Changes in dairy sales from year earlier

Item	1978	1979
	Percent	
Total milk[1]	+2.4	+1.2
Manufactured products:		
American cheese	+5.4	+2.2
Other cheese	+9.4	+4.2
Cottage cheese[2]	+0.7	-2.0
Butter	+5.1	-0.9
Ice cream	+0.6	+0.3
Ice milk	-0.2	-4.3
Canned milk	-2.9	-1.4
Nonfat dry milk	-3.5	-8.6
Fluid products	+.2	-0.2
Whole milk	-2.2	-2.9
Skim and lowfat milk	+4.5	+4.4
Cream and mixtures	+1.4	+1.3

[1] On a milk equivalent, fat-solids basis. [2] Creamed and low-fat.

Table 7--Commercial disappearance: Total milk, annual and by quarters, 1977-79 1/

Item	1977	1978					1979 2/				
		By quarters				Annual	By quarters				Annual
		1st	2nd	3rd	4th		1st	2nd	3rd	4th	
		Billion pounds									
Production	122.7	29.7	32.6	30.4	28.8	121.6	29.8	32.8	31.2	29.8	123.6
Farm use	2.8	.7	.7	.7	.7	2.7	.6	.6	.6	.6	2.5
Marketings	119.9	29.0	31.9	29.7	28.1	118.9	29.2	32.2	30.6	29.2	121.1
Beginning commercial stocks	5.3	4.9	5.1	5.6	5.3	4.9	4.5	4.9	6.3	6.4	4.5
Imports	2.0	.5	.4	.5	.9	2.3	.4	.5	.6	.9	2.3
Total supply	127.1	34.4	37.4	35.8	34.3	126.1	34.1	37.6	37.5	36.5	127.9
Ending commercial stocks	4.9	5.1	5.6	5.3	4.5	4.5	4.9	6.3	6.4	5.4	5.4
Net removals	6.1	1.2	1.9	- .1	-.2	2.7	.2	1.1	4/	.8	2.1
Commercial disappearance Actual	116.1	28.1	29.9	30.6	30.0	118.9	29.0	30.2	30.9	30.3	120.3
Percent change 3/	- .3	+4.2	+4.8	+ .4	+ .7	+2.4	+2.4	+ .9	+ .6	+ .9	+1.2

1/ Milk equivalent, fat solids basis. Totals may not add due to rounding.
2/ Preliminary.
3/ From year earlier using unrounded data.
4/ Less than 50,000 pounds.

Table 8--Commercial disappearance: Selected dairy products, United States, annual 1970-79, quarters, 1978-79

Year and quarter	Butter 1/	Cheese		Nonfat dry milk	Canned Milk	Frozen products 3/
		American 2/	Other			
	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. gal.
1970	898.2	1,398.0	909.1	983.2	1,213.8	1,097.3
1971	847.1	1,454.8	987.0	981.8	1,186.9	1,102.4
1972	885.4	1,595.7	1,127.8	919.2	1,102.6	1,108.6
1973	885.6	1,677.1	1,210.2	1,110.1	1,056.7	1,118.6
1974	929.9	1,780.6	1,276.5	809.9	999.5	1,128.0
1975	951.0	1,717.1	1,331.9	697.0	923.9	1,183.9
1976	919.0	1,920.9	1,458.0	719.2	899.0	1,154.0
1977	859.8	1,958.8	1,512.3	682.2	799.2	1,167.6
1978	903.5	2,064.7	1,655.1	658.4	776.1	1,170.4
1979	895.8	2,110.5	1,724.8	601.7	765.4	1,157.6
1978 - 1st	225.4	527.7	388.5	177.9	196.7	249.2
2nd	217.7	518.7	388.2	135.2	179.7	333.8
3rd	222.3	497.7	405.5	190.3	163.6	346.3
4th	238.2	520.6	472.9	155.0	236.0	241.1
1979 - 1st	247.7	518.4	391.3	171.6	194.4	250.5
2nd	203.6	542.3	427.8	112.4	160.7	325.0
3rd	208.0	515.0	439.5	195.0	184.4	342.3
4th	237.1	535.0	466.5	123.3	225.9	239.8
	1978-79 percent change					
1st	+9.7	-1.8	+0.7	-3.5	-1.2	+0.5
2nd	-6.5	+4.5	+10.2	-16.9	-10.6	-2.6
3rd	-6.4	+3.5	+8.4	+2.5	+12.7	-1.2
4th	- .5	+2.8	-1.4	-20.5	-4.3	- .5

1/ Imports include butter equivalent of butteroil. 2/ Imports include Colby cheese; stocks do not include processed cheese. 3/ Excludes Mellorine.

Finally, prices of alternative protein sources, which include red meats, poultry and eggs, relative to dairy product prices will influence dairy sales. For first-half 1980, retail beef prices are expected to be up about 10 percent from a year earlier, pork prices down a tenth, while poultry and egg prices will probably be slightly below last year's levels.

During 1979, commercial use of dairy products rose 1.2 percent to 120.3 billion pounds (table 7). The previous alltime high was 119 billion pounds in 1978. This compares with the 1-percent trend increase that characterized the 1970's.

Commercial use of American and other-than-American cheese rose by 2.2 and 4.2 percent, respectively, last year (table 8). These gains were smaller than those of 1978, but similar to the 1977 advances. Meanwhile, butter sales declined by about 1 percent, and use of nonfat dry milk dropped by 8½ percent. Fluid milk sales were virtually unchanged from 1978, with most of the strength due to the continued increasing proportion of lowfat and skim milk in the sales mix.

With commercial use of cheese likely to increase again in 1980 and with prospects for use of butter and fluid milk less certain, total commercial use of milk and dairy products likely will match or exceed the record 1979 levels—although any increase likely will be smaller than the trend gains of recent years.

Small Gain in Per Capita Use During 1979

Civilian per capita consumption of milk and dairy products increased by 5 pounds during 1979 to 561 pounds (milk equivalent, fat solids basis). Both increased commercial use and larger CCC donations contributed to the consumption gain. Per person use of milkfat increased to 20.6 pounds in 1979 from 20.4 pounds a year earlier, primarily due to larger consumption of butter and cheese offsetting decreased milkfat use in fluid milk (table 9). Americans consumed 38.4 pounds of solids-not-fat last year, an increase of 1 percent.

Per capita cheese consumption rose 3 percent during 1979 to 17.7 pounds, with most of the gain due to larger consumption of other-than-American types of cheese (table 10). Use of butter per individual increased 2 percent to 4.6 pounds, while nonfat dry milk consumption per capita rose 3 percent to 3.3 pounds. Larger USDA donations last year accounted for the increased per capita consumption of butter and nonfat dry milk.

Among other products, per capita use of lowfat milk, lowfat cottage cheese, ice cream, and condensed milk was up last year, while per capita consumption of whole fluid milk, creamed cottage cheese, ice milk and sherbet declined. These changes are continuations of long-time trends.

Per capita consumption of all dairy products for 1980 probably will match or be slightly lower than in 1979. With substantially higher purchases by the government under the price support program, CCC donations may increase and offset any decreases in per capita dairy product sales.

Commercial Stocks Large

Commercial stocks of dairy products were considerably above the relatively small levels of a year-earlier on February 1. Milkfat holdings were up 20 percent, while stocks of solids-not-fat were 40 percent greater than a year ago. The present large stock levels are indicative of milk production expanding more rapidly than demand for dairy products.

February 1 commercial holdings of butter were 33½ percent above a year earlier, while manufacturers' stocks of nonfat dry milk were 131 percent above the very small levels of a year ago. The wholesale prices of butter and nonfat dry milk,

Per capita civilian consumption

Item	1977	1978	1979	1978-79 change
	Pounds			*Percent*
Products:				
Butter	4.4	4.5	4.6	+2.2
Cheese	16.4	17.2	17.7	+2.9
Cottage cheese	4.8	4.8	4.7	-2.1
Ice cream	17.8	17.7	17.9	+1.1
Ice milk	7.9	7.8	7.4	-5.1
Nonfat dry milk	3.4	3.2	3.3	+3.1
Canned milk	4.5	4.2	4.3	+2.4
Fluid milk:				
Whole	169.2	163.6	157.2	-3.9
Lowfat and skim	88.4	91.6	94.9	+3.6
Cream and mixtures	5.6	5.6	5.6	0
Milkfat	20.1	20.4	20.6	+1.0
Milk solids-not-fat	38.3	38.0	38.4	+1.1

Dairy product stocks

Item	Feb. 1, 1978	Feb. 1, 1979	Feb. 1, 1980
	Million pounds		
Commercial:			
Butter	50.0	22.7	30.3
American cheese	357.1	355.5	398.8
Other cheese	64.3	75.2	109.7
Nonfat dry milk	61.3	37.0	85.3
Milkfat	181.6	162.7	194.3
Solids-not-fat	202.5	182.1	253.3
Milk equivalent	5,167	4,667	5,303
Government:			
Butter	145.8	184.0	159.7
American cheese	56.5	20.3	6.6
Nonfat dry milk	628.0	523.0	368.8
Milkfat	135.5	154.6	130.7
Solids-not-fat	621.5	509.3	356.8
Milk equivalent	3,568	4,000	3,365

Table 9 --Factors influencing and indicative of the demand for milk and dairy products, United States, selected years, 1960-79

Year	Total population July 1 (including Armed Forces overseas)	Total civilian employment	Per capita disposable income		Civilian per capita disappearance					Retail price indexes		
			Actual	Deflated by consumer price index 1/	Milk equivalent		Milk solids		Margarine	Consumer price	All foods	Dairy products
					Fat-solids basis	Calcium content basis	Milkfat	Solids-not-fat				
	--- Million ---		--- Dollars ---		---------- Pounds ----------					---- 1967=100 ----		
1960	180.7	65.8	1,934	2,180	653	512	24.5	41.4	9.4	88.7	88.0	88.4
1965	194.3	71.1	2,430	2,571	620	505	22.9	40.6	9.9	94.5	94.4	90.0
1966	196.6	72.9	2,597	2,672	604	503	22.3	40.3	10.5	97.2	99.1	95.8
1967	198.7	74.4	2,740	2,740	581	494	21.4	39.5	10.5	100.0	100.0	100.0
1968	200.7	75.9	2,930	2,812	577	499	21.2	39.7	10.8	104.2	103.6	103.3
1969	202.7	77.9	3,111	2,833	569	497	20.9	39.6	10.8	109.8	108.9	106.7
1970	204.9	78.6	3,348	2,879	562	486	20.6	39.8	11.0	116.3	114.9	111.8
1971	207.0	79.1	3,588	2,958	557	490	20.4	39.8	11.1	121.3	118.4	115.3
1972	208.8	81.7	3,837	3,062	561	479	20.6	39.6	11.3	125.3	123.5	117.1
1973	210.4	84.4	4,285	3,219	555	477	20.4	39.8	11.3	133.1	141.4	127.9
1974	211.9	85.9	4,646	3,146	544	471	20.0	38.2	11.3	147.7	161.7	151.9
1975	213.6	84.8	5,088	3,156	546	469	20.1	38.0	11.2	161.2	175.4	156.6
1976	215.2	87.5	5,504	3,228	548	486	20.1	38.7	12.2	170.5	180.8	169.3
1977	216.9	90.5	6,017	3,315	551	482	20.1	38.3	11.6	181.5	192.2	173.9
1978	218.7	94.4	6,672	3,415	558	473	20.4	38.0	11.4	195.4	211.4	185.6
1979 2/	220.6	96.9	7,365	3,388	560	479	20.6	38.4	11.5	217.4	234.5	207.1

1/ 1967 dollars.
2/ Preliminary.

Table 10--Milk and dairy product sales (domestic disappearance, commercial sources) total and per capita, selected years, United States, 1970-79 1/

Year	Fluid milk product sales					Butter	Cheese			Evaporated and condensed	
	Fluid whole milk	Cream 2/	Low-fat milk 3/	Total product weight	Whole milk equivalent 4/		Whole and part skim milk 5/		Cottage cheese 6/	Whole milk	Skimmed milk
							American	Other			
	Total										
	Million pounds										
1970	42,956	1,067	10,289	54,312	51,998	902	1,393	892	1,060	1,349	1,016
1971	42,108	1,076	11,485	54,669	51,853	878	1,452	971	1,108	1,303	1,039
1972	41,851	1,093	12,826	55,770	53,227	861	1,573	1,110	1,133	1,236	980
1973	40,443	1,130	14,062	55,635	52,413	846	1,661	1,193	1,103	1,194	894
1974	38,358	1,143	14,815	54,316	50,514	917	1,771	1,267	992	1,154	732
1975	38,256	1,175	16,558	55,989	51,123	948	1,692	1,317	1,006	1,097	761
1976	37,061	1,189	17,710	55,960	51,505	932	1,912	1,446	1,025	1,046	783
1977	35,638	1,199	18,988	55,825	51,383	860	1,912	1,493	1,032	939	854
1978	34,868	1,216	19,851	55,935	51,196	894	2,050	1,627	1,038	885	772
1979 7/	33,846	1,232	20,730	55,808	50,000	923	2,107	1,739	1,018	935	772
	Per capita 8/										
	Pounds										
1970	214	5.3	51.3	271	259	4.4	6.8	4.4	5.2	6.6	5.0
1971	207	5.3	56.5	269	255	4.3	7.0	4.7	5.4	6.3	5.0
1972	204	5.3	62.5	272	259	4.1	7.6	5.3	5.4	5.9	4.7
1973	195	5.5	67.9	269	253	4.0	7.9	5.7	5.3	5.7	4.3
1974	184	5.5	70.9	260	242	4.3	8.4	6.0	4.7	5.5	3.5
1975	181	5.6	78.5	266	243	4.4	8.0	6.2	4.7	5.1	3.6
1976	174	5.6	83.3	263	242	4.3	8.9	6.7	4.8	4.9	3.6
1977	166	5.6	88.4	260	239	4.0	8.8	6.9	4.8	4.3	3.9
1978	161	5.6	91.7	259	237	4.1	9.4	7.5	4.8	4.1	3.5
1979 7/	155	5.6	94.8	255	229	4.2	9.6	7.9	4.6	4.2	3.5

Year	Frozen products					Dry products			Whey 9/
	Ice cream	Ice milk	Sherbet	Other	Mello-rine	Whole milk	Nonfat dry milk	Butter-milk	
	Total								
	Million pounds								
1970	3,656	1,577	318	40	249	43	960	51	294
1971	3,676	1,582	317	47	232	32	958	55	319
1972	3,685	1,599	325	53	218	24	853	48	377
1973	3,714	1,604	346	70	191	21	1,056	39	384
1974	3,753	1,629	325	56	166	15	839	44	453
1975	4,015	1,643	316	66	144	16	668	44	477
1976	3,928	1,574	322	64	112	33	743	38	527
1977	3,887	1,694	324	72	90	34	698	59	530
1978	3,912	1,689	312	78	78	56	634	50	543
1979 7/	3,987	1,617	298	78	76	65	674	48	612
	Per capita 8/								
	Pounds								
1970	17.9	7.7	1.6	0.2	1.2	0.2	4.7	0.3	1.5
1971	17.8	7.7	1.5	.2	1.1	.2	4.6	.3	1.6
1972	17.7	7.7	1.6	.3	1.0	.1	4.1	.2	1.8
1973	17.7	7.6	1.6	.3	.9	.1	5.0	.2	1.8
1974	17.8	7.7	1.5	.3	.8	.1	4.0	.2	2.1
1975	18.8	7.7	1.5	.3	.7	.1	3.1	.2	2.2
1976	18.3	7.3	1.5	.3	.5	.2	3.5	.2	2.5
1977	18.0	7.8	1.5	.3	.4	.2	3.2	.3	2.5
1978	17.9	7.7	1.4	.4	.4	.3	2.9	.2	2.5
1979 7/	18.1	7.3	1.4	.4	.3	.3	3.1	.2	2.8

1/ Excludes milk used on farms where produced and distribution from USDA supplies; includes sales to the Armed Services for use in the United States.
2/ Includes milk and cream mixtures.
3/ Includes skim milk, buttermilk, flavored milk drinks, and yogurt.
4/ Fat solids basis.
5/ Excludes cottage cheese.
6/ Includes full-skim American.
7/ Preliminary.
8/ Based on resident population, except fluid milk product sales--based on estimated population using fluid products from purchased sources.
9/ Includes modified whey products starting 1975.

Table 11--Milk solids and selected dairy products: Supply and utilization, 1972-79

Year and item	Supply				Utilization					Ending stocks
	Beginning stocks	Production	Imports	Total supply	Foreign		Domestic		Total use 2/	
					Exports	Shipments 1/	Military	Civilian		
	Million pounds									
Milkfat										
1972	185	4,410	66	4,461	57	25	66	4,253	4,461	200
1973	200	4,225	150	4,575	24	24	46	4,235	4,388	187
1974	187	4,238	108	4,533	21	20	42	4,185	4,325	208
1975	208	4,238	65	4,511	21	17	39	4,239	4,374	137
1976	137	4,406	74	4,617	19	20	36	4,282	4,414	203
1977	203	4,483	75	4,761	18	20	35	4,315	4,444	317
1978 3/	317	4,470	87	4,874	13	23	35	4,424	4,550	324
1979 3/	324	4,536	87	4,947	13	22	35	4,507	4,632	315
Solids-not-fat										
1972	200	10,334	67	10,601	332	53	94	8,173	10,439	162
1973	162	9,932	335	10,429	77	46	80	8,286	10,232	197
1974	197	9,940	216	10,353	77	42	70	8,010	9,901	452
1975	452	9,930	67	10,449	170	33	65	8,024	9,870	579
1976	579	10,343	76	10,998	178	37	63	8,245	10,365	633
1977	633	10,540	81	11,254	201	38	64	8,226	10,433	821
1978 3/	821	10,458	95	11,374	293	40	66	8,237	10,655	719
1979 3/	719	10,632	101	11,452	250	41	65	8,396	10,812	640
Butter 4/										
1972	97	1,102	2	1,201	44	10	23	1,017	1,094	107
1973	107	919	56	1,082	4	13	9	999	1,025	7/ 57
1974	7/ 57	962	2	1,021	1	6	9	956	972	49
1975	49	984	2	1,035	1	2	9	1,012	1,024	11
1976	11	979	2	992	1	3	7	934	945	47
1977	47	1,086	2	1,135	2	2	5	941	950	185
1978 3/	185	994	2	1,181	1	4	3	966	974	207
1979 3/	207	985	2	1,194	1	4	3	1,010	1,018	176
American cheese										
1972	242	1,652	15	1,909	4	17	5	1,614	1,640	269
1973	269	1,678	28	1,975	4	16	4	1,661	1,685	290
1974	290	1,862	112	2,264	5	24	3	1,811	1,843	421
1975	421	1,660	16	2,097	5	19	3	1,762	1,789	308
1976	308	2,049	14	2,371	6	16	4	1,933	1,959	412
1977	412	2,043	16	2,471	7	12	7	2,022	2,048	423
1978 3/	423	2,074	18	2,515	4	12	9	2,111	2,136	379
1979 3/	379	2,187	18	2,584	5	16	9	2,140	2,170	414
Other cheese										
1972	65	952	164	1,181	3	6	5	1,105	1,119	62
1973	62	1,007	202	1,271	3	7	5	1,188	1,203	68
1974	68	1,075	204	1,347	3	4	7	1,260	1,274	73
1975	73	1,151	163	1,387	4	5	7	1,310	1,326	61
1976	61	1,272	193	1,526	3	10	3	1,443	1,459	67
1977	67	1,315	194	1,576	3	16	2	1,491	1,512	64
1978 3/	64	1,445	224	1,733	6	22	2	1,625	1,655	78
1979 3/	78	1,552	230	1,860	7	20	2	1,737	1,766	94
Evaporated and condensed milk 5/										
1972	89	1,435	2	1,526	55	72	5	1,313	1,445	81
1973	81	1,338	3	1,422	43	58	4	1,248	1,353	69
1974	69	1,285	3	1,357	43	58	2	1,175	1,278	79
1975	79	1,218	1	1,298	54	64	2	1,119	1,239	59
1976	59	1,203	1	1,263	49	76	0	1,067	1,192	71
1977	71	1,063	1	1,135	34	62	1	963	1,060	75
1978 3/	75	1,013	1	1,089	37	81	2	899	1,019	70
1979 3/	70	8/1,068	0	8/1,138	41	68	2	8/ 950	8/1,061	77
Nonfat dry milk 6/										
1972	90	1,223	2	1,315	282	23	5	955	1,270	45
1973	45	917	267	1,229	18	19	1	1,113	1,154	75
1974	75	1,020	115	1,210	9	18	1	884	916	294
1975	294	1,001	2	1,297	113	6	1	703	828	469
1976	469	926	2	1,397	126	8	0	764	911	486
1977	486	1,107	2	1,595	156	8	0	729	917	678
1978 3/	678	920	2	1,600	267	9	1	683	1,015	585
1979 3/	585	907	2	1,494	201	12	1	723	1,008	486

1/ To U.S. territories.
2/ Includes fed to animals or wasted where applicable.
3/ Preliminary.
4/ Includes butter equivalent of butteroil.
5/ Unskimmed includes both bulk and case goods.
6/ Human food only.
7/ Includes an estimated 10 million pounds of imported butter.
8/ Estimated.

both near the USDA support purchase price, reflected these ample stocks.

Commercial stocks of cheese on February 1 were also up substantially from a year earlier. American cheese stocks were 12 percent higher, and stocks of other varieties were up 46 percent.

Among other products, canned milk stocks were 14 percent above a year earlier, while dry buttermilk holdings were up by nearly three-fourths. Manufacturers' stocks of dry whey products for human food, considered burdensome a year ago, were down by a third.

In 1979, small year-to-year milk output increases and a buoyant dairy product demand kept stock levels low during the first half (table 12). In contrast, commercial holdings of dairy products can be expected to remain at high levels for the first half of 1980, unless demand shows unexpected strength.

CCC Purchases Heavy

With increased milk and dairy product production, and with wholesale dairy product prices close to support, January-February CCC removals greatly exceeded those of a year earlier. Government purchases of dairy products under the price support program totaled 1.2 billion pounds of milk equivalent during the first two months of 1980, compared to the 1.3 billion pounds removed during the entire first half of 1979. March purchases by CCC probably will taper off from the recent high rates as wholesale prices increase in anticipation of the higher April 1 purchase prices.

Deliveries to the CCC of butter, nonfat dry milk and American cheese all posted substantial year-to-year increases during January-February. The 37 million pounds of butter removed from commercial markets contrasts with 11 million pounds removed last year, while powder purchases rose from 4.2 million pounds in January-February 1979 to 66.9 million pounds this year. In the first two months of 1980, manufacturers cleared 40 million pounds of American-type cheese to CCC, whereas last year the government sold back some cheese to the industry during that period.

USDA dairy purchases[1]

Item	January-February		
	1979	1980	Change
	Million pounds		*Percent*
Butter	11.2	37.1	+231.3
American cheese	-.3	40.1	*
Nonfat dry milk	4.2	66.9	*
Evaporated milk	3.0	2.6	-13.3
Milk equivalent	235	1,167	+396.6

[1] Deliveries minus unrestricted sales. *More than 1,000.

With relatively strong gains in milk production likely to continue through at least the first half of the year, CCC removals will continue to be substantial through the flush spring production period. Removals during the second half of 1980 will be dependent on the strength of milk production relative to commercial use of dairy products and on the support purchase prices that will become effective October 1. But for the year, CCC removals will be up substantially from 1979.

During calendar 1979, CCC removed 2.1 billion pounds on a milk equivalent basis, down about a fourth from 1978 (table 13). An unusually high proportion of the total removals occurred during the fourth quarter, when milk production was at its seasonal low, but substantially above year-earlier levels. The government purchased 81.6 million pounds of butter last year (net of sellbacks) or about 25 percent less than in 1978. Net removals of nonfat dry milk, proportionately larger than those of butter, declined by a tenth to 255 million pounds. On the other hand, net purchases by CCC of American cheese were up slightly last year to 40 million pounds.

Net government expenditures on dairy price supports and related programs totaled $251 million during the fiscal year which ended September 30, 1979 (tables 14 and 15). This was 45 percent less than in the previous fiscal year.

Despite the large quantity of butter that was cleared to the CCC during the first two months of 1980, uncommitted stocks of butter were 165 million pounds, 3 percent above year-earlier levels on March 1. Government holdings of nonfat dry milk totaled 392 million pounds, down 18 percent on March 1. Uncommitted stocks of American cheese, negligible a year ago, totaled 33 million pounds.

Uncommitted CCC stocks

Item	March 1	
	1979	1980
	Million pounds	
Butter	160.6	165.3
American cheese	.2	33.3
Nonfat dry milk	476.5	391.6

Federal Order Summary—1979[1]

Almost 116,500 producers delivered 79.4 billion pounds of milk—approximately 66 percent of the total milk marketed in the United States—to

[1] Prepared by John R. Mengel, Dairy Division, AMS, USDA.

Table 12--Stocks of dairy products, United States, end of year or month, 1965-79

Year and month	Commercial stocks					Government stocks				Total milk equivalent 3/
	Butter	American cheese	Other cheese	Canned milk	Nonfat dry milk	Butter 1/	American cheese 2/	Nonfat dry milk	Evaporated milk	
	Million pounds									
1965	27.1	270.2	37.6	140.7	58.2	25.0	0.3	96.2	---	4,458
1966	30.2	322.1	50.4	204.5	118.2	2.1	.2	---	---	4,858
1967	18.4	302.3	46.2	196.0	98.7	150.2	80.8	157.6	---	8,252
1968	14.5	291.1	62.3	101.3	79.0	102.9	51.6	198.7	5.6	6,634
1969	25.1	264.4	52.1	106.9	83.9	63.6	1.1	137.8	42.9	5,245
1970	19.7	252.7	70.5	115.7	95.3	99.1	1.3	42.6	.1	5,803
1971	26.2	235.6	65.4	88.6	77.0	70.7	6.1	12.5	.2	5,104
1972	11.1	269.3	62.0	74.7	37.9	96.4	.2	6.9	5.8	5,498
1973	33.5	289.9	67.5	69.2	74.5	22.8	.4	.1	4/	5,207
1974	34.7	419.8	73.1	79.2	134.6	14.5	1.1	158.6	4/	5,886
1975	5.8	305.7	60.8	58.6	47.1	5.0	2.0	421.8	4/	3,844
1976	28.0	409.8	67.1	70.7	98.8	19.1	1.6	386.6	.1	5,708
1977	34.2	361.5	64.0	75.2	60.7	150.7	60.5	617.2	4/	8,626
1978										
Mar.	56.7	333.4	65.3	52.1	49.8	179.0	40.9	612.3	4/	9,165
June	39.5	402.4	76.8	101.4	95.0	242.6	41.7	607.0	.1	11,018
Sept.	28.2	383.1	79.4	136.0	63.6	238.5	50.2	617.4	4/	10,672
Dec.	15.2	349.1	78.4	70.3	40.1	191.8	29.7	545.0	4/	8,730
1979 5/										
Mar.	31.6	359.7	76.9	49.6	50.5	177.9	8.1	472.8	---	8,618
June	55.2	428.9	88.0	117.1	128.3	204.9	3.3	410.0	.1	10,515
Sept.	52.1	452.4	85.5	129.2	96.0	165.8	2.7	453.6	.2	9,899
Dec.	25.2	403.7	106.3	76.7	92.6	152.6	2.8	392.7	.3	8,604

1/ Includes butter equivalent of butteroil and ghee, 1965. 2/ Includes process cheese held by USDA beginning May 1967. 3/ Includes manufactured products for which current monthly series are available (excludes nonfat dry milk). Excludes cream and bulk condensed milk beginning 1968. 4/ Less than 50,000 pounds. 5/ Preliminary.

Table 13 -Dairy products removed from the commercial market by programs of the United States Department of Agriculture. 1949-77

Year and month	Removals 1/					Solids content of removals			
	Butter 2/	American cheese 3/	Evaporated milk 4/	Nonfat dry milk 5/	Milk equivalent	Milkfat	Solids-not-fat	As a percentage of marketings: Milkfat	As a percentage of marketings: Solids-not-fat
	Million pounds							Percent	
1949	111.7	25.5	---	325.5	2,489	100.4	321.1	2.6	4.6
1950	14.6	83.2	---	327.2	1,126	40.9	339.9	1.1	4.9
1951	-27.3	-7.1	---	35.3	-618	-24.0	31.5	---	.5
1952	16.1	1.7	---	42.3	339	13.8	41.2	.4	.6
1953	355.2	302.5	---	597.1	10,200	387.5	668.9	9.7	8.6
1954	305.1	242.5	---	644.4	8,588	328.2	695.5	8.0	8.7
1955	162.0	141.3	---	534.7	4,685	179.6	558.0	4.3	6.8
1956	164.6	186.5	---	723.4	5,206	197.6	753.0	4.7	8.7
1957	172.5	240.6	---	825.2	5,870	222.1	867.5	5.2	9.8
1958	183.7	75.0	---	886.0	4,658	178.2	875.0	4.2	9.8
1959	123.7	57.2	---	830.3	3,214	123.8	815.6	2.9	9.1
1960	144.8	.3	---	852.8	3,101	122.6	819.8	2.9	8.9
1961	329.4	100.0	---	1,085.6	8,019	305.0	1,075.3	6.9	11.2
1962	402.7	212.9	---	1,386.1	10,724	402.4	1,399.0	9.1	14.3
1963	307.5	110.9	---	1,219.2	7,745	291.8	1,210.1	6.7	12.4
1964	295.7	128.5	---	1,168.8	7,676	287.6	1,166.9	6.5	11.6
1965	241.0	48.6	---	1,098.4	5,665	217.4	1,074.0	5.0	10.8
1966	25.1	10.8	---	365.8	645	26.2	355.5	.6	3.7
1967	265.1	180.5	---	687.0	7,427	276.3	719.1	6.6	7.5
1968	194.8	87.5	54.9	557.8	5,159	193.2	575.4	4.7	6.0
1969	187.9	27.7	107.5	407.2	4,479	171.6	421.5	4.2	4.4
1970	246.4	48.9	48.4	451.6	5,774	221.1	460.7	5.3	4.8
1971	292.2	90.7	111.4	456.2	6/7,268	6/276.5	6/490.1	6.6	5.0
1972	233.7	30.4	97.0	345.0	6/5,345	6/208.4	6/362.0	4.9	3.6
1973	97.7	3.2	53.7	36.8	6/2,185	6/ 84.9	6/ 49.0	2.1	.5
1974	32.7	60.3	28.3	265.0	6/1,346	6/ 50.4	6/280.2	1.2	2.9
1975	63.4	68.2	24.5	394.5	2,036	77.7	405.6	1.9	4.2
1976	39.4	38.0	21.8	157.1	1,236	46.8	167.2	1.1	1.7
1977	221.8	148.2	15.9	461.7	6,080	230.8	494.9	5.3	4.8
1978	112.0	39.7	17.6	285.0	2,743	106.3	290.7	2.5	2.8
1979 7/									
Jan.	9.3	---	1.4	3.1	194	7.6	3.3		
Feb.	2.0	-.3	1.6	1.1	41	1.6	1.3		
Mar.	---	---	1.3	.8	3	.1	1.0		
Apr.	13.6	8/	1.9	21.3	284	11.2	21.0		
May	26.8	1.7	1.7	44.8	573	22.6	44.2		
June	8.1	2.2	1.1	49.8	192	7.7	48.9		
July	-1.0	8.3	1.5	41.4	65	2.3	42.6		
Aug.	-2.4	.3	1.2	15.0	-44	-1.6	14.7		
Sept.	---	---	1.1	10.0	2	.2	9.8		
Oct.	9.8	.7	1.1	18.6	211	8.3	18.4		
Nov.	8.4	6.4	1.7	23.6	240	9.1	25.1		
Dec.	7.2	21.0	.8	25.8	358	12.8	31.5		
Total*	81.6	40.2	16.4	255.3	2,119	81.7	261.8	1.9	2.5

1/ Delivery basis, after unrestricted domestic sales.
2/ Includes butter equivalent of anhydrous milkfat, PIK, and purchases under Sec. 709, and 4a.
3/ Includes purchases under Sec. 709, and 4a.
4/ Includes purchases under 4a.
5/ Includes PIK certificates issues, and purchases under Sec. 709 and 4a.
6/ Includes dry whole milk purchases beginning November, 1971.
7/ Preliminary.
8/ Less than 50,000 pounds.
* Totals may not add due to rounding.

Table 14--Net government expenditures on dairy support and related programs, fiscal years, 1950-79

Year beginning July 1	Net support purchases 1/	Military milk 2/	Section 32 3/	Section 709 4/	Section 4(a) 4/	Export assistance 5/	Total (excluding special milk)	Special milk program 6/
				Million dollars				
1949-50	170.5	---	17.6	---	---	---	188.1	---
1950-51	7/-49.1	---	8/-.9	---	---	---	7/-50.0	---
1951-52	1.6	---	7.5	---	---	---	9.1	---
1952-53	274.9	---	25.1	---	---	---	300.0	---
1953-54	400.4	---	74.0	---	---	---	474.4	---
1954-55	228.7	4.3	24.4	---	---	---	257.4	22.2
1955-56	237.9	7.3	39.0	---	---	---	284.2	48.2
1956-57	239.1	16.4	75.6	---	---	---	331.1	61.0
1957-58	205.9	30.4	123.7	---	---	---	360.0	66.7
1958-59	102.1	23.0	106.2	---	---	---	231.3	74.7
1959-60	159.5	23.6	35.1	---	---	---	218.2	81.2
1960-61	173.9	25.3	82.1	---	---	---	281.3	87.0
1961-62	539.0	25.9	47.1	---	---	---	612.0	91.7
1962-63	454.0	24.8	---	---	---	6.7	485.5	93.7
1963-64	311.7	26.5	4.4	---	---	36.5	379.1	97.1
1964-65	157.2	26.2	105.6	---	---	44.7	333.7	86.5
1965-66	26.1	---	38.7	---	---	3.8	68.6	97.0
1966-67	283.9	---	.9	14.2	---	18.4	317.4	96.1
1967-68	357.1	---	---	---	---	7.1	364.2	103.1
1968-69	268.8	---	45.4	---	---	13.1	327.3	101.9
1969-70	168.6	---	107.1	7.8	---	7.4	290.9	102.9
1970-71	315.4	---	91.6	3.2	---	11.6	421.8	91.8
1971-72	267.0	---	63.9	---	---	7.3	338.2	93.6
1972-73	135.8	---	15.4	0.1	---	1.5	152.8	90.8
1973-74	31.4	---	10.8	13.7	15.0	---	70.9	50.2
1974-75	485.8	---	6.5	---	3.8	---	496.1	122.9
1975-76	69.6	---	4.1	---	2.8	---	76.5	144.0
Transition quarter*	43.5	---	1.0	---	---	---	44.5	25.5
1976-77	709.8	---	---	---	4.5	---	714.3	109.7
1977-78	446.4	---	---	---	5.0	---	451.4	137.8
1978-79	244.3	---	---	---	6.3	---	250.6	134.1

1/ CCC support purchases and related costs (for processing, packaging, transporting and storing) of dairy products, less proceeds from sales to commercial buyers for domestic use and for export, U.S. military agencies, foreign government and private welfare agencies, and Section 32 programs.

2/ CCC reimbursements to U.S. military agencies, Veterans' Administration and other participants.

3/ Expenditures of Section 32 funds to buy dairy products in the market and from CCC for school lunch and welfare uses.

4/ Purchases of dairy products at market prices under Sec. 709 of the Food and Agriculture Act of 1965 and under Sec. 4(a) of the Agriculture and Consumer Protection Act of 1973, for domestic school lunch and welfare uses.

5/ Value of Payment-in-kind certificates issued by CCC on exports of nonfat dry milk, butter and other high-milkfat products, and CCC cost of exports under Title I, P.L. 480 of dairy products not originating in CCC stocks.

6/ Expenditures under the program to increase milk consumption by children in schools, child-care centers, and similar institutions.

7/ Net receipt due to sales exceeding purchases.

8/ Receipt due to adjustment.

* Start of fiscal year moved to October 1 in 1976.

SOURCE: Agricultural Stabilization and Conservation Service, USDA.

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Table 15--USDA expenditures for dairy products, fiscal year ending September 30, 1979

Item	Value					Quantity		
	Butter and butter products	Cheese	Nonfat dry milk	Condensed and evaporated milk	Total	Butter and butter products	Cheese	Nonfat dry milk
	Million dollars					Million pounds		
CCC outlays								
Purchases	74.5	16.8	155.4		246.7	61.9	13.8	196.4
Storage, handling	5.0	0.4	5.0		10.4			
Transportation	2.7	1.9	8.2		12.8			
Processing, packaging	1.8	1.3	1/16.8		19.9			
Total carrying charges	9.5	3.6	30.0		43.1			
Total outlays	84.0	20.4	185.4		289.8			
Sales proceeds to CCC								
Dollar sales	21.7	1.0	21.6		44.3	17.8	1.0	88.2
Donations - Schools & needy	65.6	59.3	2/49.2		174.1	54.4	46.3	3/64.1
P.L. 480, Title II	--	--	4/28.6		28.6	--	--	5/178.6
Other receipts	0.1	0.1	1.0		1.2	0.1	0.2	1.7
Total	87.4	60.4	100.4		248.2	72.3	47.5	332.6
Expenditures								
CCC net expenditures	-3.4	-40.0	85.0		41.6			
Section 4(a)	--	--	--	6.3	6.3			
P.L. 480, Title II	--	--	4/28.6	--	28.6			
Donations - Schools & needy	65.6	59.3	2/49.2	--	174.1			
USDA net expenditures	62.2	19.3	162.8	6.3	250.6			

1/ Includes about $13.5 million to process CCC-owned NDM into Mozzarella cheese.
2/ Includes $22.0 million, the value of CCC-owned NDM to produce Mozzarella cheese.
3/ Includes 21.6 million, pounds of NDM used for Mozzarella cheese.
4/ Includes $5.5 million used in CSM.
5/ Includes 34.1 million pounds as an ingredient in CSM.

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handlers regulated under the 47 Federal milk orders during 1979. Producer deliveries at Federal order plants during the year rose 1.7 percent above the previous year, reflecting an increase of 4.3 percent in average daily deliveries per producer which totaled 1,869 pounds in 1979. This increase in deliveries per producer more than offset an annual average decline of nearly 3,000 producers from 1978 to 1979. During the last quarter of 1979, the number of new producers coming into Federal order markets more than offset those leaving, thus moderating the decline in producer numbers during the year—from 117,844 in January to 116,707 in December.

Producer milk used in Class I in 1979 totaled 41 billion pounds, 0.3 percent less than last year. This, in combination with the increase in producer deliveries, resulted in a decline in the Class I utilization percentage from 53 percent in 1978 to 52 percent in 1979.

Producer blend prices during 1979 averaged $11.97 per 100 pounds, up from $10.56 the previous year. The rise reflected increases in the Minnesota-Wisconsin (M-W) price, which is the mover of minimum class prices in all Federal orders. Minimum Class I prices in Federal order markets, based on the M-W price for the second preceding month, averaged $12.88 per 100 pounds during 1979, $1.48 above 1978. Class I prices announced by cooperatives in 1979 averaged an estimated 51 cents per hundredweight above minimum order Class I prices, up from the 34-36 cents per hundredweight yearly averages which existed since 1976.

Sales of lowfat and skim milk items increased again in 1979 as the longtime trend towards products containing lower butterfat continued. Sales of such items in 1979 in 46 comparable markets were 4.3 percent above 1978 and accounted for more than 40 percent of total sales of fluid milk in these 46 marketing areas. As in recent years, 2 percent and 1 percent lowfat milk without added solids accounted for the increase in the sales of lowfat and skim milk items. Sales of lowfat and skim milk items with solids added continued to decrease in 1979.

Proposed New Orders

The Department reopened a hearing in February 1980 to obtain additional evidence on the need for a proposed new order that would regulate the handling of milk in southwestern Idaho and eastern Oregon. Dairy farmer cooperatives in the area have proposed an order that would cover 18 southwestern Idaho and 5 eastern Oregon counties. The proposed order would regulate around 250 million pounds of milk per year delivered by about 225 producers. A revised recommended decision on the proposal is expected later this year. On the basis of the initial hearing, the Department had tentatively concluded that an order for the area was not needed.

A proposal has also been received by the Department to consider establishing a Federal milk order in Alabama. The proposed order would cover the entire State of Alabama plus 4 counties in western Florida and would regulate around one billion pounds of milk a year delivered by approximately 1,000 producers. The Department has invited comments on the proposal plus any additional proposals before deciding whether or not to hold a hearing on this issue.

Mergers and Expansions

The longtime trend towards fewer and larger markets through merger and expansion into previously unregulated areas may be continuing in the 1980's. The Department has received a proposal which would merge the Oklahoma Metropolitan, Wichita, and Neosho Valley marketing areas and that portion of the Red River Valley marketing area located in Oklahoma into a single marketing area. The proposed merged area would also include the remaining Oklahoma territory which is currently unregulated, as well as Beckham County, Oklahoma, which is currently in the Texas Panhandle marketing area. The Department has invited additional proposals before deciding whether a hearing should be held.

Other Actions

Producers in 10 markets decided to terminate their advertising and promotion programs at the end of 1979. There are now only 6 markets with advertising and promotion programs.

In other pending actions, a hearing was held this month to consider replacing the Class I base plan in the Georgia order with a seasonal base-excess plan. The Class I base plan has been in effect in the Georgia order since March 1972. Proponents have asked that this amendment be made by September 1, 1980.

The Department has received a proposal to change in all 47 markets the pricing of milk reconstituted by processors for sale as a fluid milk product. Under present regulations, reconstituted milk for bottling is priced at the same level as fresh milk sold for fluid use. The proposed change would remove reconstituted milk from Class I pricing. Interested parties had through February to submit other proposals for changing the present regulatory treatment of reconstituted milk and any comments on whether or not a hearing on this issue should be held. The Department is presently deciding whether a hearing is warranted.

FOREIGN DAIRY TRADE AND TRENDS

1979 Imports Match 1978

Imports of dairy products last year totaled 2.3 billion pounds milk equivalent, 0.3 percent less than in 1978 (table 16). Cheese imports accounted for about 2.0 billion pounds, while other dairy products contributed about 0.3 billion pounds. On a milk equivalent basis, quota cheese imports increased 4½ percent to 1.0 billion pounds, while nonquota cheese imports were down slightly to 1.1 billion pounds. Imports of all products subject to quota totaled 96 percent of the 1.3 billion pound quota during 1979, compared with 94 percent in 1978. The 2.3 billion pounds (milk equivalent) of imports represented about 1.9 percent of the total commercial use of dairy products last year.

Over 248 million pounds of cheese were imported during 1979, a gain of about 2½ percent. Imports of quota-type cheese increased nearly 7 percent, while nonquota-types declined slightly. A major portion of the increased imports of quota-type cheeses was due to larger offerings of Swiss-type cheeses entering at prices less than 7 cents above the American cheese support purchase price, and were thus subject to quota. Importers, partially in anticipation of the imposition of new quotas for almost all cheese varieties on January 1, 1980, increased cheese imports during December by 14 percent over a year earlier.

Among other quota products, imports of butter, butteroil, butterfat mixtures, frozen cream, nonfat dry milk and animal feed with milk solids all had filled or nearly filled quotas by the end of the year. Imports of these products are held to low levels by the quota system.

Of the nonquota products, casein imports were up 10 percent in 1979 and totaled 151 million pounds. Lactose imports, meanwhile, declined by over a third.

Dairy product imports[1]
(Quota and non-quota)

Year	Yearly quota[2]	Imports subject to quota	Imports not subject to quota	Total
	Million pounds			
1970	946	845	1,033	1,878
1971	973	776	580	1,356
1972	1,166	1,023	671	1,694
1973	3,608	3,263	596	3,859
1974	2,293	1,968	955	2,923
1975	1,306	976	693	1,669
1976	1,306	1,037	906	1,943
1977	1,306	1,119	849	1,968
1978	1,306	1,222	1,083	2,305
1979	1,306	1,228	1,071	2,299

[1] Milk equivalent. [2] Includes temporary quotas authorized in 1973 and 1974.

In response to the new cheese import quotas and regulations concerning those quotas effective during 1980, the European Community reduced export refunds for several varieties of cheese exported to the United States. However, since the new regulations allow subsidies if they don't result in price-undercutting of domestic cheese, the Community also raised export refunds on some varieties.

During 1979, U.S. dairy product exports declined nearly 2 percent to 362 million pounds milk equivalent. Exports of cheese, butter, and canned milk increased; lactose exports increased fourfold. Nonfat dry milk exports (not for relief and charity) declined by two-fifths. Food-aid shipments of nonfat dry milk decreased a quarter, while relief exports of corn-soya-milk mixture were up 10 percent.

U.S. dairy trade
(milk equivalent)

Year and quarters	Imports		Exports	Shipments[2]
	Cheese	Other		
	Million pounds			
1978				
1st	379	157	87	168
2nd	337	51	105	156
3rd	484	24	85	145
4th	799	72	91	133
Year[2]	1,999	307	368	602
1979				
1st	251	133	98	150
2nd	432	43	90	167
3rd	517	33	74	143
4th	829	60	100	[3]104
Year[2]	2,028	270	362	N.A.

[1] To U.S. territories. [2] May not add due to rounding. [3] October-November.

Shipments of dairy products to U.S. Territories during 1979 were about equal to the 600 million pounds of 1978. American-type cheese shipments increased substantially to more than offset lower shipments of other products.

EC Stocks Down

European Community (EC) stocks of nonfat dry milk were about 60 percent less than a year earlier at the beginning of the new year, as stock levels declined rapidly in late 1979. This significant reduction is primarily due to highly subsidized exports and subsidized sales within the EC for hog and poultry feed use. As a result of the rapid drawdown in powder stocks, the EC suspended the subsidies for powder used as livestock feed and

Table 16--Dairy Products: U.S. imports, quota and non-quota, total 1978, and January-December, 1978-79 1/

Product	Calendar year quota	1978 imports	December			Cumulative, January-December		
			1978	1979	1979 as a % of 1978	1978	1979	1979 as a % of 1978
	Thousand pounds				Percent	Thousand pounds		Percent
Cheese, quota types								
American-Cheddar	10,037.5	10,748	2,452	3,565	145	10,748	10,257	95
-Other	6,096.6	7,037	1,101	4,147	377	7,037	7,707	110
Italian-Original loaves	11,500.1	8,994	1,557	996	64	8,994	6,695	74
-Other	1,494.0	1,317	150	90	60	1,317	997	76
Edam and Gouda-Natural	9,200.4	8,601	2,032	1,736	85	8,601	8,559	100
-Processed	3,151.0	3,079	1,005	110	11	3,079	1,283	42
Blue Mold	5,017.0	5,505	666	834	125	5,505	4,335	79
Swiss-Emmenthaler 2/	20,420.0	14,032	3,358	2,122	63	14,032	19,638	140
-Gruyere-process 2/	11,242.0	10,607	1,545	2,253	146	10,607	11,026	104
Other-Over 0.5% fat 2/	40,730.0	38,374	14,596	12,064	83	38,374	42,892	112
-Under 0.5% fat 2/	8,901.0	2,457	332	2,858	861	2,457	4,869	198
Total	127,789.6	110,752	28,794	30,775	107	110,752	118,259	107
Cheese, non-quota types								
Swiss-Emmenthaler		59,647	6,630	8,974	135	59,647	55,691	93
-Gruyere-process		8,329	596	897	151	8,329	7,616	91
Other		39,899	5,925	8,292	140	39,899	45,734	115
Pecorino		20,288	3,462	2,677	77	20,288	18,400	91
Roquefort		1,471	131	164	125	1,471	1,328	90
Other 3/		1,800	70	220	314	1,800	1,261	70
Total		131,434	16,814	21,223	126	131,434	130,030	99
Other quota products								
Butter	707.0	736	212	107	50	736	809	110
Butteroil	1,200.0	1,200	--	--	--	1,200	1,200	100
Butterfat mixtures	2,580.0	4/2,757	377	224	59	2,757	2,545	92
Ice cream	3,377.3	4/4,360	--	575	--	4,360	2,497	57
Frozen cream	12,540.0	4/14,586	1,153	--	--	14,586	12,315	84
Nonfat dry milk	1,807.0	4/2,388	73	104	142	2,388	2,178	91
Dried buttermilk	496.0	478	38	157	413	478	317	66
Evaporated milk	1,312.0	---	--	--	--	--	1	--
Condensed milk	4,079.0	887	--	54	--	887	383	43
Chocolate crumb-Regular	17,000.0	8,686	914	238	26	8,686	10,059	116
-Lowfat	4,680.0	1,546	--	--	--	1,546	1,941	126
Animal feed with milk solids	16,300.0	14,647	1,008	752	75	14,647	15,695	107
Non-quota products								
Casein		137,134	7,419	13,839	187	137,134	150,827	110
Lactose		3,112	163	113	69	3,112	1,983	64
Milk equivalent, fat solids basis total all products	1,305,620	2,305,258	397,894	423,927	107	2,305,258	2,298,610	100

1/ Preliminary. 2/ Subject to quota if f.o.b. price is less than "pricebreak" (7 cents above the American cheese support purchase price, rounded to nearest whole cent--$1.31 effective October 12, 1979. 3/ Gjetost, Bryndza, Gammelost and Noekkelost, and Goya. 4/ Probable error in reported data.

reduced export subsidies. In addition, EC butter stocks were down about a sixth, mirroring extensive export sales.

EC milk production during 1979 totaled about 2 percent more than a year earlier, a slower rate of gain than the 3½ percent increase in 1978. With milk cow numbers virtually unchanged last year, increased output per cow accounted for the increase. Butter and cheese production both absorbed some of the extra milk supplies, each increasing by about 2½ percent.

Subsidized butter sales helped increase butter consumption in the EC by 2 percent last year; cheese use also increased 2 percent. Meanwhile, nonfat dry milk use in the EC was up a sixth, due to increased use of powder as animal feed.

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Table 17.--U.S. Dairy Situation at a Glance

Item	Unit or base period	1978	1979							1980
		Jan.	Jan.	Feb.	Sept.	Oct.	Nov.	Dec.	Year	Jan.
Production and cow numbers:										
Total milk	Mil. lb.	9,972	10,004	9,317	10,014	10,108	9,657	10,061	123,623	10,260
Milk per cow	Lb.	913	923	862	929	936	895	931	11,471	951
Number of milk cows	Thou.	10,925	10,833	10,804	10,785	10,795	10,794	10,803	10,777	10,785
Prices received by farmers:										
All milk, sold to plants, 100 pounds	Dol.	10.20	11.90	11.90	12.40	12.60	12.90	12.80	12.04	12.80
Percentage of parity 1/	Pct.	73	75	75	74	73	74	73	74	71
Manufacturing grade milk, 100 pounds	Dol.	9.17	10.90	10.80	11.40	11.60	11.70	11.80	11.10	11.80
Parity equivalent	Dol.	11.47	13.31	13.57	14.36	14.44	14.53	14.62	14.11	15.31
Fat content	Pct.	3.78	3.82	3.78	3.63	3.76	3.83	3.84	3.69	3.81
Minnesota-Wisconsin (3.5% fat), 100 pounds	Dol.	8.91	10.55	10.52	11.32	11.25	11.27	11.34	10.91	11.37
Milk eligible for fluid market, 100 pounds	Dol.	10.50	12.10	12.10	12.50	12.80	13.10	13.00	12.23	13.00
Price ratios and dairy ration values:										
Milk-feed 2/	Lb.	1.50	1.61	1.59	1.54	1.55	1.58	1.57	1.55	1.54
Manufacturing grade milk-hog	Lb.	.21	.22	.20	.30	.34	.31	.31	.27	.32
Manufacturing grade milk-beef	Lb.	.24	.18	.17	.17	.18	.18	.18	.17	.18
Value of concentrate ration fed milk cows	Dol.	5.96	6.34	---	---	6.85	---	---	6.60	7.00
Farm cash receipts from dairy products	Mil. dol.	1,020	1,185	1,082	1,197	1,222	1,201	1,280	14,512	---
Production of factory products:										
Butter	Mil. lb.	107.4	97.4	86.6	61.5	76.8	74.7	83.8	985.4	103.8
American cheese, whole milk	Mil. lb.	161.1	173.8	166.0	167.4	171.9	159.9	172.5	2,187.3	182.0
Cheese, other than American	Mil. lb.	110.0	115.0	110.1	124.0	132.1	130.0	132.1	1,522.4	128.5
Canned milk, unskimmed	Mil. lb.	56.1	58.0	56.8	62.9	59.4	59.0	58.5	787.8	59.8
Dry whole milk	Mil. lb.	6.9	7.2	5.8	5.3	5.5	6.9	6.3	84.3	8.0
Frozen products 3/	Mil. gal.	71.4	74.3	76.9	100.6	93.0	76.9	69.9	1,157.6	77.1
Creamed cottage cheese	Mil. lb.	68.4	69.0	65.5	66.2	72.7	64.6	61.8	847.9	67.1
Total whole milk equivalent 4/	Mil. lb.	5,369	5,285	5,016	4,970	5,159	4,761	4,995	65,888	5,606
Nonfat dry milk, human use	Mil. lb.	77.0	55.1	54.9	55.6	58.1	56.2	73.3	907.3	75.0
Wholesale prices:										
Butter, Grade A, Chicago, pound	Ct.	100.7	111.3	111.3	127.8	128.8	130.0	130.2	122.4	130.2
Cheese, American (40-pound blocks), f.o.b. Wisconsin assembling points, pound	Ct.	100.1	119.5	118.6	131.5	128.8	125.8	125.0	123.8	125.6
Evaporated milk, case	Dol.	15.46	17.01	17.36	18.30	18.54	18.72	18.72	17.92	19.05
Dry whole milk, pound	Ct.	84.3	98.2	98.1	105.0	105.2	105.3	105.8	101.4	105.7
Nonfat dry milk, pound	Ct.	68.1	76.4	76.6	80.7	83.4	84.0	84.1	80.0	83.9
Dairy products (BLS)	1967=100	178.0	203.4	203.1	218.3	218.2	219.0	219.6	211.2	221.4
Retail prices (BLS):										
Consumer price index 5/	1967=100	187.2	204.7	207.1	223.4	225.4	227.5	229.9	217.4	233.2
All food 5/	1967=100	199.2	223.9	228.2	237.1	238.2	239.1	241.7	234.5	243.8
All dairy products 5/	1967=100	177.7	198.4	200.6	211.3	213.3	216.0	216.9	207.1	218.4
Fluid milk and cream	12/77=100	100.6	111.8	113.5	119.0	120.3	121.9	122.7	116.8	123.2
Whole milk	1967=100	164.8	183.5	186.0	195.4	197.6	200.4	201.2	191.4	202.3
Other	12/77=100	100.4	112.1	113.2	118.1	119.2	120.6	122.0	116.4	122.1
Manufactured dairy products	12/77=100	100.3	112.7	113.2	120.1	120.9	122.3	122.5	117.4	123.8
Butter	1967=100	169.6	195.8	193.3	209.9	213.3	214.4	214.0	202.9	216.9
Cheese	12/77=100	100.5	112.9	113.9	120.1	121.0	122.7	122.6	117.7	123.5
Frozen desserts	12/77=100	99.4	111.8	112.7	120.1	120.4	121.4	122.6	117.0	124.0
Other	12/77=100	100.2	110.1	110.2	115.5	116.4	117.8	117.9	114.0	119.8
Margarine	1967=100	213.9	233.6	235.2	245.5	244.4	246.2	247.7	240.3	248.3
Stocks, end of month:										
Creamery butter	Mil. lb.	195.7	206.7	214.7	218.0	200.4	182.2	177.8	---	190.0
Cheese, total 6/	Mil. lb.	478.0	451.0	457.9	540.6	526.9	519.4	512.9	---	515.1
Canned milk, unskimmed	Mil. lb.	59.8	66.0	56.4	129.5	119.0	88.7	77.0	---	75.6
Dry whole milk	Mil. lb.	5.9	4.9	4.6	6.1	4.9	4.9	4.3	---	4.7
Total whole milk equivalent 7/	Mil. lb.	8,735	8,666	8,868	9,899	9,354	8,826	8,604	---	8,667
Nonfat dry milk	Mil. lb.	689.3	560.0	549.3	549.6	516.4	485.2	485.2	---	454.2
Commercial disappearance:										
Creamery butter	Mil. lb.	67.2	82.1	78.3	65.9	75.3	83.1	78.7	895.8	---
Cheese, American	Mil. lb.	166.2	169.4	157.7	172.0	188.5	167.5	179.0	2,110.5	---
Cheese, other than American	Mil. lb.	122.1	129.2	113.1	147.6	149.0	152.9	164.6	1,724.8	---
Canned milk, unskimmed	Mil. lb.	70.2	61.0	64.9	64.3	68.7	87.7	69.5	765.4	---
Milk in all products	Mil. lb.	9,162	9,575	8,946	10,155	10,234	9,972	10,106	120,345	---
Nonfat dry milk	Mil. lb.	47.7	55.3	50.6	59.8	42.6	41.3	39.4	601.7	---
USDA net removals:										
Butter	Mil. lb.	26.0	9.3	2.0	---	9.8	8.4	7.2	81.6	26.7
Cheddar cheese	Mil. lb.	1.4	---	- .3	---	.7	6.4	21.0	40.2	18.0
Nonfat dry milk	Mil. lb.	29.1	3.1	1.1	10.0	18.6	23.6	25.8	255.3	34.9
Evaporated milk	Mil. lb.	1.6	1.4	1.6	1.1	1.1	1.7	.8	16.4	1.3
Total whole milk equivalent	Mil. lb.	554	194	41	2	211	240	358	2,119	732
Fluid sales, change from year earlier: 8/										
Whole milk	Pct.	- .4	-3.6	-2.8	-4.8	-2.9	-2.7	-4.2	-2.9	-5.3
Low-fat and skim milk	Pct.	+6.7	+5.1	+5.2	+4.4	+5.1	+3.5	+3.3	+4.4	+3.6
Total fluid milk	Pct.	+2.1	- .3	+ .3	-1.5	+ .2	0	-1.4	- .2	-1.9
Cream and cream mixtures	Pct.	-3.2	+2.1	- .5	+ .6	+ .4	+1.1	+1.1	+1.3	N.A.

1/ Seasonally adjusted prices as percentage of parity price.
2/ Different series than formerly published.
3/ Ice cream, ice milk, and sherbet.
4/ Includes manufactured products for which current monthly series are available.
5/ For all urban consumers starting January 1978.
6/ Natural, plus process American cheese held by CCC.
7/ Excludes cream and bulk condensed milk.
8/ Daily average sales in Federal and State Marketing areas.
9/ Less than 50,000 pounds.
N.A. Not Available

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